

19971204.qrp v00_n929.qrs.971204

Date: Thu, 4 Dec 1997 19:03:14 EST
From: qrp-l@Lehigh.EDU
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: QRP-L digest 929

QRP-L Digest 929

Topics covered in this issue include:

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by Monte Stark <ku7y@sage.dri.edu>
- 2) [31841] SPICE2G6 in FORTRAN
by adams@chuck.dallas.sgi.com (Chuck Adams)
- 3) [31842] straight key
by The Whittemores <wb1edi@scoot.netis.com>
- 4) [31843] N/T+ FOX/ PROPAGATION/ code speed
by ARDUJENSKI@aol.com
- 5) [31844]
by "Donnie Barnes" <daniel@perry.gulfnet.com>
- 6) [31845] Re: DIPOLE IS WORKING
by "Steve Hurst" <shurst@magiclink.com>
- 7) [31846] Re: Dec 4 FOX
by "William R. Moore" <wr.moore@worldnet.att.net>
- 8) [31847] Correction to my Novice/Tech fox report for December 1
by "Johnson" <johns516@maroon.tc.umn.edu>
- 9) [31848] Stl Vertical
by victorj@fast.net
- 10) [31849] Re: DIPOLE IS WORKING
by Henry Freedenberg <henryf@quartz.gly.fsu.edu>
- 11) [31850] Re: Dec 4 FOX
by "J. Skalski" <jskalski@acsu.buffalo.edu>
- 12) [31851] WBL Paddles
by "Bob Fox" <aa8yo@tir.com>
- 13) [31852] Tenna tape
by Terres Family <terresfm@ncia.net>
- 14) [31853] Re: DIPOLE IS WORKING
by Monte Stark <ku7y@sage.dri.edu>
- 15) [31854] Market survey, DDS VFO
by Steven Weber <kd1jv@moose.ncia.net>
- 16) [31855] Flux removers
by n4so@juno.com (charles k brown)
- 17) [31856] RadCom article wanted
by Larry Cruise <larry.cruise@MCI.Com>
- 18) [31857] Info: Mag wire & torroids
by Paul Helbert <phelbert@rica.net>
- 19) [31858] Crystal Evaluator Parts Overlay

- by n5inz@juno.com (John M Andrews)
- 20) [31859] CQ KL7IXI
by K0su@kktv.com
- 21) [31860] Fox Audio File Web Page Neglect (Or how I spent my lack of vacation)
by Jess Gypin <jessgrp@concentric.net>
- 22) [31861] FOX: STATE STANDINGS 1997/98 FOXHUNT
by Chris Cartwright <ccart@dns.vidtel.com>
- 23) [31862] Re: FOX: STATE STANDINGS 1997/98 FOXHUNT
by adams@chuck.dallas.sgi.com (Chuck Adams)
- 24) [31863] Re: Crystal Evaluator Parts Overlay
by Stanley Wilson <microres@crl.com>
- 25) [31864] Re: FOX: STATE STANDINGS 1997/98 FOXHUNT
by Roger Hightower <n7kt@dancris.com>
- 26) [31865] FS:OHR Xcvt's
by k4zd@juno.com (Robert L Hanrahan)
- 27) [31866] LADDER-LINE DISCONNECT?
by ARDUJENSKI@aol.com
- 28) [31867] Re: FOX: STATE STANDINGS 1997/98 FOXHUNT
by Joe Gervais <vole@primenet.com>
- 29) [31868] Re: Best way to de-flux circuit boards?
by gsurrency@juno.com (Gary Surrency)
- 30) [31869] Re: LADDER-LINE DISCONNECT?
by Monte Stark <ku7y@sage.dri.edu>
- 31) [31870] Grounding Question
by "Steve Hurst" <shurst@magiclink.com>
- 32) [31871] Re: Best way to de-flux circuit boards?
by "Steve Hurst" <shurst@magiclink.com>
- 33) [31872] Re: Best way to de-flux circuit boards?
by Monte Stark <ku7y@sage.dri.edu>
- 34) [31873] Re: FOX: STATE STANDINGS 1997/98 FOXHUNT
by "Daniel L. Evans" <dlevans@hsonline.net>
- 35) [31874] Re: Info: Mag wire & torroids
by n5inz@juno.com (John M Andrews)
- 36) [31875] FS: TS-130S Transceiver in very good condition
by ke3fl@juno.com
- 37) [31876] Re: Market survey, DDS VFO
by Leon Heller <leon@lfheller.demon.co.uk>
- 38) [31877] Re: FOX: STATE STANDINGS 1997/98 FOXHUNT
by Terres Family <terresfm@ncia.net>
- 39) [31878] 6 mts. rig
by Carlos Tortonese <tortonese@ciudad.com.ar>
- 40) [31879] Re: Best way to de-flux circuit boards?
by Terres Family <terresfm@ncia.net>
- 41) [31880] Re: FOX: STATE STANDINGS 1997/98 FOXHUNT
by "Wilford D. Lindsey" <70511.3041@compuserve.com>
- 42) [31881] RE: Grounding Question
by Kevin Muenzler <wb5rue@stic.net>
- 43) [31882] Fox: N0UR

by Martin Squicciarini <skitch@resuba.com>
44) [31883] Lightning Protection
by Ken Graham <k5id@ipa.net>
45) [31884] SD-xpedition
by adams@chuck.dallas.sgi.com (Chuck Adams)
46) [31885] Re: WBL Paddles
by FAITHD@dnr.state.wi.us (Don C. Faith III, AM/7, \ (608\) 267-3135)
47) [31886] Re: straight key
by "CHARLES LESKIE" <CLESKIE@um-f1.umd.umich.edu>
48) [31887] Minnesnowta Hubbabaloo
by "John T. Croteau" <johnc@geekopolis.com>
49) [31888] Trade? 1 k ten turn pot for 10 k
by Paul Helbert <phelbert@rica.net>
50) [31889] N7ML?
by "Rattray, Bruce" <Rattray@siast.sk.ca>
51) [31890] Re: N7ML?
by "Scott Rosenfeld [NF3I]" <ham@w3eax.umd.edu>
52) [31891] K06KA's 2n2222 web page URL ?
by Stanley Wilson <microres@crl.com>
53) [31892] Re: Lightning Protection
by K5BDZ@aol.com
54) [31893] 2N2222 Contest - Reflex Amplifiers and QRP design
by Stan Wilson <microres@crl.com>
55) [31894] DC/VA/MD QRP Show & tell & dinner, Friday December 5th
by "Scott Rosenfeld [NF3I]" <ham@w3eax.umd.edu>
56) [31895] Re: MFJ Vertical
by Philip Karras 827-2956 <PXXK4@CDRH.FDA.GOV>
57) [31896] Re: FOX Report-N0UR/ Correction and K8FF Paddle NOTE!
by Ed Loranger <we6w@qsl.net>
58) [31897] Re: straight key
by JIM KW3U <kw3u@warwick.net>
59) [31898] MAR-8
by "W. Daniel, 9V1ZV" <daniel@pandora.lugs.org.sg>
60) [31899] K8FF Paddle NOTE!
by Ed Loranger <we6w@qsl.net>
61) [31900] Re: N0UR Fox
by Bob Tellefsen-CNSE97 <Bob_Tellefsen-CNSE97@email.mot.com>
62) [31901] MFJ mods posting
by Mike Broga <mbroga@cu-online.com>
63) [31902] Re: Lightning Protection
by John Sullivan <sullivjd@sound.net>
64) [31903] Re: Market survey, DDS VFO
by "S. Lee" <slee@u.washington.edu>
65) [31904] Re: MFJ mods posting
by "david's" <elim@ime.net>
66) [31905] Re: K8FF Paddle NOTE!
by Ed Loranger <we6w@qsl.net>
67) [31906] Palmtop Computers

by Tom Moll <tomm@xata.com>
68) [31907] Re: Info: Mag wire & torroids
by Ed Tanton <n4xy@bellsouth.net>
69) [31908] Circad Help
by ki6ds@dpol.k12.ca.us (Hendricks, Doug)
70) [31909] RE: Lightning Protection - long (25k)
by Kevin Muenzler WB5RUE <wb5rue@amsat.org>
71) [31910] Re: N7ML?
by "George T. Baker" <w5yr@swbell.net>
72) [31911] Re: Best way to de-flux circuit boards?
by gsurrency@juno.com (Gary Surrency)
73) [31912] Re: K8FF Paddle NOTE!
by "George T. Baker" <w5yr@swbell.net>
74) [31913] Soapbox for the December Spartan Sprint (Long)
by Russ Carpenter <russ@natworld.com>
75) [31914] Results of the DECEMBER SPARTAN SPRINT
by Russ Carpenter <russ@natworld.com>
76) [31915] Re: Tenna tape
by "Marshall Emm" <mgemm@mtechnologies.com>
77) [31916] Re: MFJ mods posting
by Michael Maiorana <mikemo@ibm.net>
78) [31917] Re: Best way to de-flux circuit boards?
by Chris Cartwright <ccart@dns.vidtel.com>
79) [31918] Modem parts
by Bob Tellefsen-CNSE97 <Bob_Tellefsen-CNSE97@email.mot.com>
80) [31919] Re: Ant tuner
by Bob Tellefsen-CNSE97 <Bob_Tellefsen-CNSE97@email.mot.com>
81) [31920] Re: Modem parts
by Ed Loranger <we6w@qsl.net>
82) [31921] Re: LADDER-LINE DISCONNECT?
by Doug <doug@sunrise.alpinet.net>
83) [31922] ground question response
by "Steve Hurst" <shurst@magiclink.com>
84) [31923] FOX: 4 hours of foxin' tonite
by Chris Cartwright <ccart@dns.vidtel.com>
85) [31924] Re: FOX: 4 hours of foxin' tonite
by adams@chuck.dallas.sgi.com (Chuck Adams)
86) [31925] Re: Palmtop Computers
by Tim Ahrens <tahrens@inetport.com>
87) [31926] SGC2020
by "Jeff M. Gold" <jmg@tntech.edu>
88) [31927] Spice Circuit Simulator...
by lalexe@pcnet.pcnet.ro (Laurentiu Alexe)
89) [31928] Re: Market survey, DDS VFO
by Steven Weber <kd1jv@moose.ncia.net>
90) [31929] Re: K8FF Paddle NOTE!
by "Michael A. Gipe" <mgipe@reliablemeters.com>
91) [31930] SPICE questions

- by Stanley Wilson <microres@crl.com>
- 92) [31931] FOX Report-NOUR, Corrected version
by Nancy <LAGESON@worldnet.att.net>
 - 93) [31932] Re: Market survey, DDS VFO
by "Michael A. Gipe" <mgipe@reliablemeters.com>
 - 94) [31933] DeMaw Univ. TX QSY to 30M?
by MNHopkins <MNHopkins@aol.com>
 - 95) [31934] FS: DSP Filter/QRP TX
by KB8UMD@aol.com
 - 96) [31935] Re: Good antenna for Fox Hunting
by Bob Tellefsen-CNSE97 <Bob_Tellefsen-CNSE97@email.mot.com>
 - 97) [31936] WBL ???
by "Steve Hurst" <shurst@magiclink.com>
 - 98) [31937] Re: Market survey, DDS VFO
by "S. Lee" <slee@u.washington.edu>
 - 99) [31938] Re: Grounding Question
by "Michael A. Gipe" <mgipe@reliablemeters.com>
 - 100) [31939] Re: 38s sideband supression help!
by Fran Flynn <fflynn@together.net>

Date: Wed, 3 Dec 1997 15:57:22 -0800 (PST)
From: Monte Stark <ku7y@sage.dri.edu>
To: Howard Friedman <haf47@juno.com>
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [31840] Re: Kanga and ARRL statistic
Message-ID: <Pine.SUN.3.90.971203155136.20603A-100000@vortex>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

On Wed, 3 Dec 1997, Howard Friedman wrote:

> Oh Goody, more League bashing!! Was there another point to your post? I
> believe it has eluded me if there was.

Wow Howard,

Looks like all Jack did was let people know what a good job
Kanga did in getting an order filled and shipped.

The ARRL was used as a form of benchmark to compare to.

Had Jack been bashing the ARRL I'm sure he would have had
done a lot better than that!

I would have to agree with Jack that the service from Kanga
was better (and less expensive) than that from the ARRL.

cu all in the fox hunts,

73, Ron, SOWP 5545M,

.....KU7Y.....ARCI #8829.....Monte "Ron" Stark.....
....ku7y@sage.dri.edu.....Washoe Lake, Nevada....
....QRP-L #17...ARS #49...NorCal #330.....NRA LIFE.....

Date: Thu, 4 Dec 1997 00:07:52 GMT
From: adams@chuck.dallas.sgi.com (Chuck Adams)
To: qrp-l@Lehigh.EDU
Subject: [31841] SPICE2G6 in FORTRAN
Message-ID: <199712040007.AAA29497@chuck.dallas.sgi.com>

Gang,

Some people wanted a copy of SPICE to run on larger systems.
Here is a pointer to the FORTRAN source code to SPICE2G6 in
tar format.

<ftp://ftp.lehigh.edu/pub/listserv/qrp-l/tools/spice2g6.tar>

This is a large program and you must know what you're doing.
I won't be able to provide support for this unless you wanna
pay me \$275 a hour for consulting fees. :-) I knew you
wouldn't. It's \$275 for the first minute and the other 59
minutes are free. ;-)

There are some Makefiles and some sample input data files
with sample output files to check it out.

I just found out that there is also a newer version of SPICE
version 3F4 written in C available and if you want to try it on
a large system then try

<http://ic.eecs.berkeley.edu/pub/Spice3/>

Both of these programs require a large system and will be
difficult to port to a 'toy' system like a small Intel box,
so this process is not recommended for the faint of heart.

I'm just the pointer to the sources and the provider of the FORTRAN version. The latter I use all the time and it works for me. I may try the C version later in the year when I can get some time to play as it does provide some PostScript graphical display features from what I gather from looking at some of the readme files. The more experienced among the group might want to comment on their thoughts and experiences for one or the other or both.

If you have the RCG Intel version of 2G6 then you have more than enough for what you probably want to do.

My thanks to Jim for providing the space for the FORTRAN version.

FYI

Chuck Adams K5FO CP-60 adams@sgi.com
<http://reality.sgi.com/adams/index.html>

Date: Wed, 03 Dec 1997 19:13:33 -0500
From: The Whittemores <wb1edi@scoot.netis.com>
To: qrp-1@Lehigh.EDU
Subject: [31842] straight key
Message-ID: <1.5.4.32.19971204001333.0067420c@mail.netis.com>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

-----<cut here>-----

What kind of knob do you prefer?

- a) flat,
- b) round,
- c) round with skirt (e.g. "Navy" knob) yes i was in the navy
- d) other -- please describe.

Do you have a size preference for the knob? If so, do you prefer

- a) a small knob (3/4' diameter or less), or
- b) a large knob (diameter greater than 3/4"). thats mine

What distance do you prefer to have the knob above the operating surface?

- a) half an inch or less and again
- b) more than half an inch.

What is your usual (or most comfortable) sending speed with a

straight key?

- a) 5-10 wpm
- b) 10-15 wpm either key or keyer
- c) 15-20 wpm
- d) more than 20 wpm

my favotite key is an old navy sealed contact key with the marking se1443 a

ive also got nye viking keys and a j38 lionel key.

does anyone have any info on the navy key?

good luck

73 de wb1edi

Barry L Whittemore

WB1EDI QRP-L NORCAL ARRL MVP AMC BSA NEQRP ARS OA

check out my web site

<http://www.netis.com/members/wb1edi>

wb1edi@scoot.netis.com

Date: Wed, 3 Dec 1997 19:30:27 -0500 (EST)

From: ARDUJENSKI@aol.com

To: qrp-l@Lehigh.EDU

Subject: [31843] N/T+ FOX/ PROPAGATION/ code speed

Message-ID: <971203193026_1051990306@mrin79>

I want to maximize the chance for the East coast states, Gulf Coast States and Alaska to be able to work the FOX and would like some input regarding what times the 40M NOVICE band is open to your area. From my observations these seem to be the best times and freqs that I observe:

0000-0100 UTC (7.38-7.45)

0100-0200 UTC (7.18-7.12)

0800-0900 UTC (7.11-7.14)

1100-1230 UTC (7.11-7.12)

These times seem to coordinate with what is predicted on the propagation charts also. It is my observation that rarely are contacts made in the second hour so I may be running several one hour openings depending on the feedback to be able to accommodate various regions

CODE SPEED: I start out at about 10-13 range but will drop down or up depending on your calling speed. I hope this has been OK with you?

.....Alan (the gray Fox) KB7MBI

Date: Wed, 3 Dec 1997 19:38:26 -0500
From: "Donnie Barnes" <daniel@perry.gulfnet.com>
To: <qrp-1@Lehigh.EDU>
Message-ID: <01bd004c\$ef322f80\$a02e2cc7@gulfnet.gulfnet.com>
MIME-Version: 1.0
Content-Type: multipart/alternative;
boundary="-----=_NextPart_000_0009_01BD0023.065C2780"

This is a multi-part message in MIME format.

-----=_NextPart_000_0009_01BD0023.065C2780
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable

unsubscribe qrp-1

-----=_NextPart_000_0009_01BD0023.065C2780
Content-Type: text/html;
charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable

<!DOCTYPE HTML PUBLIC "-//W3C//DTD W3 HTML//EN">
<HTML>
<HEAD>

<META content=3Dtext/html; charset=3Diso-8859-1 =
http-equiv=3DContent-Type>
<META content=3D'"MSHTML 4.71.1712.3"' name=3DGENERATOR>
</HEAD>
<BODY bgColor=3D#ffffff>
<DIV>unsubscribe =
qrp-1</DIV></BODY></HTML>

-----=_NextPart_000_0009_01BD0023.065C2780--

Date: Wed, 3 Dec 1997 18:08:42 -0700
From: "Steve Hurst" <shurst@magiclink.com>
To: <qrp-1@Lehigh.EDU>
Subject: [31845] Re: DIPOLE IS WORKING

Message-ID: <199712040106.UAA35578@nss4.cc.Lehigh.EDU>

MIME-Version: 1.0

Content-Type: text/plain; charset=ISO-8859-1

Content-Transfer-Encoding: 7bit

I left out one important thing !! I should have said ".... and lived to tell about it..." !!!!

: -)

73.

Steve, KA7NOC

> From: Steve Hurst <shurst@magiclink.com>

> To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>

> Subject: Re: DIPOLE IS WORKING

> Date: Wednesday, December 03, 1997 4:43 PM

>

>

>

> -----David Kreinberg wrote, in part....-----

> > Gang,

> >

> > Never leave your feedline (be it coax/twinlead/

> > ladder line) connected to your rig when not

> > in use. I echo that thought - I always disconnect

> > my feedlines from the tuner when my station is

> > idle. Figure that's pretty cheap insurance from

> > blowing up the rig :-)

> >

> > Thanks, folks

> >

> > 73 de Dave NR3E/5

> > nr Dallas, TX

> > qrp-l #25

> >

>

> Here's a question that I've always wondered about . Lets say I have

> disconnected my coax from the rig. What happens now if I get a lightning

> strike ? With the coax laying on the floor of the shack ? It would be

best

> to disconnect it at the antenna , no? Or at least before it comes inside

> the house. Anyone ever taken a hit with the coax disconnected inside the

> shack and the coax on the floor ? Tnx.....

>

> 73,

> Steve Hurst

> KA7NOC (southern Idaho)
> http://www.magiclink.com/web/shurst
> shurst@magiclink.com
>
>
>

Date: Wed, 3 Dec 1997 19:22:14 -0600
From: "William R. Moore" <wr.moore@worldnet.att.net>
To: <N10DL@aol.com>, "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [31846] Re: Dec 4 FOX
Message-ID: <01bd0053\$0da8e520\$8a11430c@wrmoorerpc>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

>Am I correct in understanding that there will be TWO Foxii out there
tonight?
>KS4L AND N0GLM? I presume they will be around 7.040-+
>
>Aron
>N10DL

No. KS4L will be on tomorrow night, 0200-0400 UTC, Dec. 5 (that's Thursday
night in the US). Don't know about N0GLM. He's not on the latest Fox
schedule.

72,
Randy, KS4L

Date: Wed, 3 Dec 1997 18:16:26 -0600
From: "Johnson" <johns516@maroon.tc.umn.edu>
To: <qrp-1@Lehigh.EDU>
Subject: [31847] Correction to my Novice/Tech fox report for December 1
Message-ID: <3485f6e560b3818@mhub1.tc.umn.edu>
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1

Content-Transfer-Encoding: 7bit

I made a mistake in my Novice/Tech fox report for December 1.

I reported:

2 0104 KB4EXW WATSON NC 579 / 559

It should be:

2 0104 WB4EXW WATSON NC 579 / 559
^^^^^^

I have it right on my work sheet, but copied it wrong into the report.

Very sorry.

73,
Tim, KB0VRV

Date: Wed, 3 Dec 1997 21:24:51 -0500 (EST)
From: victorj@fast.net
To: qrp-l@Lehigh.EDU
Subject: [31848] Stl Vertical
Message-ID: <199712040224.VAA28535@post1.fast.net>

The contacts on my vertical have broken off(with help form my six year old),the copper collar is intact.Does any one have any ideas about what I can use for a replacement and if so where can I get it.
Thanks
Vic K3VP

Date: Sun, 30 Nov 1997 22:55:46 -0500
From: Henry Freedenberg <henryf@quartz.gly.fsu.edu>
To: shurst@magiclink.com
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [31849] Re: DIPOLE IS WORKING
Message-ID: <34823542.284D@quartz.gly.fsu.edu>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Steve Hurst wrote:

> Here's a question that I've always wondered about . Lets say I have

> disconnected my coax from the rig. What happens now if I get a lightning
> strike ? With the coax laying on the floor of the shack ? It would be best
> to disconnect it at the antenna , no? Or at least before it comes inside
> the house. Anyone ever taken a hit with the coax disconnected inside the
> shack and the coax on the floor ? Tnx.....

I dunno.

Way back in the early 80's I had a TA 33 at 40 ft. Had a quick disconnect on my PL-259. Always took it off when the rig was not in use. One day I was sitting in the shack minding my own business. I heard a loud pop and saw an arc cross between the center conductor and the ground of the quick disconnect plug. Wierd thing is that there was not a convection cell overhead. The day was cloudy and some storms had moved through earlier but it was not as if I was in the middle of a T-storm. Guess it was static discharge. Gave me something to talk about. Also made me a believer in quick disconnects.

Henry

Date: Wed, 3 Dec 1997 21:42:13 -0500 (EST)
From: "J. Skalski" <jskalski@acsu.buffalo.edu>
To: "William R. Moore" <wr.moore@worldnet.att.net>
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [31850] Re: Dec 4 FOX
Message-ID: <Pine.GS0.3.96.971203214013.28583A-1000000@joxer.acsu.buffalo.edu>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Randy,
Be sure to turn the array towards the northeast :-)

73,

Jim N2GO

The Buffalo QRP CONNECTION
ARCI #9013 QRP-L #381

KS4L will be on tomorrow night, 0200-0400 UTC, Dec. 5 (that's Thurs

> 72,
> Randy, KS4L

Date: Wed, 03 Dec 97 22:45:38 PST
From: "Bob Fox" <aa8yo@tir.com>
To: qrp-l@Lehigh.EDU
Cc: cw@qth.com
Subject: [31851] WBL Paddles
Message-ID: <MAPI.Id.0016.006138796f2020203030303530303035@MAPI.to.RFC822>
MIME-Version: 1.0
Content-Type: text/plain; charset="ISO-8859-1"; X-MAPIextension=".TXT"
Content-Transfer-Encoding: quoted-printable

Hi Gang,

Just got done going over 550 + emails after losing access for a couple days. Just wondering if anyone who ordered a set of WBL Design paddles received them in recent days. I did not see any postings regarding them.

Tomorrow it will have been 16 weeks since I ordered mine and I am still waiting. Patience is a virtue...

73 - Bob / aa8yo@tir.com

Date: Wed, 03 Dec 1997 23:11:03 -0800
From: Terres Family <terresfm@ncia.net>
To: qrp-l list <qrp-l@Lehigh.EDU>
Subject: [31852] Tenna tape
Message-ID: <34865787.5406@ncia.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

This might have been addressed in the past but..
Anybody ever try Tenna Tape for an antenna? I'm not even sure if it's still sold but was thinking about getting and trying some.
thanks
72 Jerry AA10F

Date: Wed, 3 Dec 1997 19:12:44 -0800 (PST)
From: Monte Stark <ku7y@sage.dri.edu>
To: Henry Freedenberg <henryf@quartz.gly.fsu.edu>
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [31853] Re: DIPOLE IS WORKING
Message-ID: <Pine.SUN.3.90.971203190628.21989B-1000000@vortex>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Hi All,

One thing you can do to get some respect for static is this;

Disconect your antenna and put your feed line (s) in a coffee can. Then just listen to them snap and pop! In the dark you can see some good arcs.

And like the man said, you don't need a storm around for this to happen.

But it's not too hard to gain some saftey for your gear.

Put a resistor across the feed line. Center conductor to shield. I use 10K 1/2 w resistors. This bleads the static off and keeps it out of the rig!

It offers NO protection from lightning. Only from static.

The little resistor will also help keep you from jumping across the room and breaking a nice radio when you are disconnecting the PL239 and your body makes the path between the shield and rig body!! :-)

Enjoy,

73, Ron, SOWP 5545M,

.....KU7Y.....ARCI #8829.....Monte "Ron" Stark.....
....ku7y@sage.dri.edu.....Washoe Lake, Nevada....
....QRP-L #17...ARS #49...NorCal #330.....NRA LIFE.....

Date: Wed, 03 Dec 1997 20:51:55
From: Steven Weber <kd1jv@moose.ncia.net>
To: qrp-l@Lehigh.EDU

Subject: [31854] Market survey, DDS VFO
Message-ID: <3.0.1.16.19971203205155.23874b34@mailhost.ncia.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Howdy Gang,

I'm toying with the idea of producing another DDS VFO based on the Analog Devices 9850 DDS chip. I'm just wondering if there are enough people interested in such a project to warrant doing it.

Here's what it would do.

1Hz to 33 Mhz (44 Mhz if I can find 125 Mhz clocks)
Knob tuned, selectable 1 Hz to 1 Mhz tuning steps, mini 8 X 2 ascii LCD display, 50 memories, RIT, XIT, programmable IF offset for super-het receivers, digital frequency calibration. Serial control might be also available.

It would be built on two pc boards, a Display / Controller board and the DDS board. The DDS board would have just the reference clock, DDS chip, output buffer and voltage regulator and would be about 3" long and 1.5" high.

I have two possible ways to make the controller board and am having a hard time deciding which way to go. One is to make it square, 2.5" X 2.5". In this case, the tuning knob would be below the display with some control buttons on either side of the display. The other way to go is to put the tuning knob to the right of the display. This would make a board 1.5" tall and 3.25" long.

There are advantages to both layouts and am wondering which way you would go if given the choice. The square display board fits nicely in a cute little LMB sloping cabinet. The short but long display board allows for a lower profile cabinet. That's the way I went for my little "concept" 9850 almost-all-band QRP rig. (7 to 21Mhz, continuous tuning)

The projected cost is about \$125.00, given the price of some of the parts in the expected quantities (small) It would be 2-3 months before the product is available, should I go ahead with it.

So, what do you all think? Got to have one, got to think about it, maybe or not in the least bit interested? Please let me know, direct.

Thanks and 72,
Steve, KD1JV....In the White Mountains of New Hampshire

"Melt Solder"

Date: Wed, 03 Dec 1997 16:41:22 EST
From: n4so@juno.com (charles k brown)
To: qrp-1@Lehigh.EDU
Subject: [31855] Flux removers
Message-ID: <19971203.214042.8127.4.n4so@juno.com>

Flux removers are in Allied Electronics catalog pages 780,
781, 785.
Flux-gone, Flux solv, and HFE Flux Remover are a few of the listed
chemicals.

Ken Brown, N4SO
QTH nr Mobile, AL/ EM50tk
qrp-1 #622
n4so@juno.com

Date: Wed, 3 Dec 1997 21:30:40 -0600
From: Larry Cruise <larry.cruise@MCI.Com>
To: "'QRP-L'" <qrp-1@Lehigh.EDU>
Subject: [31856] RadCom article wanted
Message-ID: <01BD0032.C12F28A0@dpenrose.mci.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
Content-Transfer-Encoding: 7bit

Hi Gang,

Anyone out there get RadCom magazine? I am looking for a product review Peter Hart
did in the Dec 1991 issue. E-mail me direct.

Thanks,

Larry (AA5TA)

Date: Wed, 03 Dec 1997 11:06:54 -0500
From: Paul Helbert <phelbert@rica.net>
To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>

Subject: [31857] Info: Mag wire & torroids
Message-ID: <3485839E.5F20ED5@rica.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Hey Gangue,

I got about a dozen responses to my questions and since only a few of them were via this reflector, I thought I'd share them with all of you. They appear here unsorted.

1. Use a sharp exacto knife. Trail the edge so as to avoid nicking the wire. Use a magnifier.
2. Leave a little slack in the leads when affixing to the pcb.
3. Pulling hard enough to break the wire is pulling too hard.
4. Glue the two torroids together with super glue before winding.
5. Green (and red) magnet wire is available in 1/4 pound spools from Amadon.
6. Flame/eraser method is fine so long as not over done and you don't go too far along the wire.
7. Powdered iron cores are electrically conductive and need to be insulated from the wire.
8. Many use sandpaper, or crocus cloth to remove the insulation.
9. Q-Dope is frequently recommended to fix the coils to the core.
10. Cores can be damaged by current, heat, shock, and mechanical stress. Most folks would scrap my damaged core.
11. Tin the wires before inserting. This proves that all the junk is off the wire.
12. Mike Czuhajewski has the hots for over-heated cores, so I sent him mine.
13. How did Nils Bull know I kept bees?
14. Torroid is spelt toroid.

Dave Sarraf's reply to another question about torroids on this reflector (Torroids, Tue, 2 Dec 1997 13:58:15-0400) is worth reading if you missed it.

Lastly, here is a quotation (used with permission) from Dewayne Kincade who makes those great little qrp automatic tuner kits.

... we simply would never reccommend anyone to play with (or use responsibly) fire. Can you imagine the law suits? We'd have to add three pages of legal disclaimers at the end of each manual.

If a woman can win a law suit against McDonalds for spilling a cup of hot coffee in her lap just beacuse the cup did not say "contents may be hot", then the part of the instruction booklet that said "using fire from a cigarette lighter, carefully burn 1/2" of the insulation back" might not be enough.

Dwayne Kincaid
WD80YG

LDG Electronics
1445 Parran Road, St. Leonard MD 20685
Phone: 410-586-2177
Fax: 410-586-8475
e-mail: ldg@radix.net
web site: <http://www.radix.net/~ldg>

What a great group!

TU es 73,

Paul, Wv3j

Date: Wed, 3 Dec 1997 21:04:20 -0600
From: n5inz@juno.com (John M Andrews)
To: qrp-1@Lehigh.EDU
Subject: [31858] Crystal Evaluator Parts Overlay
Message-ID: <19971203.213636.3214.5.N5INZ@juno.com>

Someone was asking about this.....just ran into an extra copy.

Reply direct.

John- N5INZ

Date: 3 Dec 1997 21:37:24 -0700
From: K0su@kktv.com
To: qrp-1@Lehigh.EDU

Subject: [31859] CQ KL7IXI
Message-ID: <199712040433.XAA167976@nss4.cc.Lehigh.EDU>

Please send me an E-mail direct. Enjoyed our QSO.

73, Rick
K0SU
Colorado Springs, CO
CQC #100 -- QRP-L #539
www.qsl.net/k0su

Date: Wed, 03 Dec 1997 21:43:50 -0700
From: Jess Gypin <jessqrp@concentric.net>
To: qrp-l@Lehigh.EDU
Subject: [31860] Fox Audio File Web Page Neglect (Or how I spent my lack of vacation)
Message-ID: <34863506.4C65@concentric.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Hi all,

I just wanted to let you know that I have not died. With the holiday season upon us all and the upcoming holidays, I have not had much time to participate in the fox hunts let alone the time to record them. I missed the hunt on Tuesday and will not be able to participate in tomorrow nights hunt at all.

I will however try to make updates to the audio files as I have time to get them recorded. I have really been trying to get files from every hunt but have not been able to. Life gets in the way of fun sometimes! I just wanted to apologize to those that have gone to the fox web page and have not seen any new files. I will try to keep them as up to date as possible. If there are still some out there that do not know what I am talking about, there is a web page out there that is dedicated to the Fox Hunt and the recording thereof. I have been posting .wav files to the web page for download so that the hunters and foxies can hear what the hunt sounds like from here. The URL is
<http://www.qsl.net/n0tifi>

Best
Jess

--

Jess N0TFI <><
<http://www.concentric.net/~jessqrp>

qrp-1 #1232 CQC #92 1997 Fox
http://www.qsl.net/n0tffi

Date: Thu, 4 Dec 1997 00:55:13 -0500 (EST)
From: Chris Cartwright <ccart@dns.vidtel.com>
To: QRP Reflector <qrp-1@Lehigh.EDU>
Subject: [31861] FOX: STATE STANDINGS 1997/98 FOXHUNT
Message-ID: <Pine.LNX.3.93.971204003518.3377A-100000@dns.vidtel.com>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

NEWS:

WV is on the board! Congrats to Lynn KJ3V.
TX continues on it "unskunked" streak.
CA breaks the 200 pelt limit and the "mercy" rule kicks in. (just kiddin')
The top five are joined by MN.
CA-209 TX-174 AZ-125 OK-54 CO/MN-46
MD ties NV and VA, moves into 12th place.
(The east coast MD/VA rivalry escalates)
MI moves into the top ten.
Aron, N10DL vows to get NH on the board (No pressure
Aron, but now everyone knows :)
MA and TN snap long dry streaks.

1997/98 FOXHUNT STATE SCORES

	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	(#= top 5 states)	
	W	N	A	V	N	N	W	K	K	K	W	N	K	K	N	T	R
F	5	Q	B	E	0	0	7	1	8	I	2	8	0	A	0	0	A
O	F	7	7	7	T	U	Q	M	C	7	U	V	E	8	U	T	N
X	N	K	T	C	F	R	Q	G	V	M	X	A	V	0	R	A	K
			K	Q	I		Q			N		R	Z	K		L	
				K										H			
AK	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	27
AL	1	-	2	1	-	1	1	4	1	2	-	1	-	1	1	22	11
AR	-	1	-	-	-	-	-	-	-	1	-	1	1	-	1	11	18
AZ	7	8	6	7	2	7	10	8	4	10	8	-	9	6	7	125	3#
CA	9	18	19	16	12	12	10	9	10	15	6	-	9	7	12	209	1#
CO	4	3	6	3	-	2	-	4	7	2	-	1	2	1	1	46	5#
CT	1	-	-	-	-	1	1	2	-	-	-	1	1	2	3	22	11

FL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	26
GA	1	-	1	-	-	1	-	1	-	-	-	1	-	2	1	11	18
IA	1	-	1	1	-	-	3	1	-	-	2	-	2	1	-	16	15
ID	1	2	1	3	1	-	1	-	1	1	1	-	1	1	2	18	13
IL	3	1	1	1	-	2	1	2	-	-	2	-	2	2	-	22	11
IN	3	-	-	-	-	1	2	1	-	1	2	-	2	2	-	17	14
KY	1	-	-	-	1	1	1	1	-	1	-	-	1	-	3	13	16
MA	-	-	-	1	-	-	-	-	-	-	-	-	-	2	1	6	23
MD	2	-	-	-	-	2	-	-	-	-	-	1	-	7	4	20	12
MI	4	2	-	1	1	1	-	2	3	-	3	1	2	5	-	25	10
MN	5	1	1	2	1	3	4	6	1	2	1	-	-	3	5	46	5#
MO	-	1	1	2	3	1	4	3	-	1	1	1	2	6	-	39	7
MT	1	1	-	-	-	-	-	-	1	1	1	-	1	-	1	10	19
NC	2	3	2	1	-	2	3	3	-	1	-	-	-	2	2	28	9
ND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	27
NJ	1	-	-	-	-	-	-	1	-	-	-	1	1	2	3	12	17
NM	2	2	4	3	2	2	1	3	2	3	3	-	2	2	3	38	8
NV	2	2	1	1	2	-	2	1	1	1	1	1	-	-	1	20	12
NY	1	-	-	-	-	4	3	2	-	1	2	3	1	5	6	40	6
OH	3	-	-	1	-	1	-	-	-	-	-	-	2	2	-	9	20
OK	-	4	2	1	3	3	5	6	1	3	2	2	4	5	2	54	4#
OR	-	-	-	1	-	1	-	-	-	-	-	-	-	-	-	5	24
PA	1	-	-	-	-	2	2	-	-	-	-	3	1	2	3	16	15
SC	1	1	-	-	-	1	-	1	-	-	-	-	1	1	1	9	20
TN	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	4	25
TX	2	9	7	7	4	9	9	12	15	8	13	6	8	9	10	174	2#
UT	2	2	4	1	-	2	-	1	-	1	-	-	-	-	-	16	15
VA	1	1	1	-	1	1	1	1	-	-	-	2	1	4	2	20	12
WA	-	1	-	-	1	2	-	-	-	-	-	-	-	-	1	6	23
WI	4	-	-	-	-	-	1	3	-	-	-	-	1	5	-	16	15
WV	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	27
GULF	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	3	26
AB	-	-	1	1	-	-	-	1	1	1	-	-	-	-	2	7	22
BC	1	-	-	-	-	1	1	1	1	-	-	-	-	-	1	8	21
ON	2	-	-	-	1	3	2	1	-	-	-	1	2	1	2	16	15
SK	1	1	-	1	1	1	1	-	-	-	-	-	2	2	1	12	17
NW	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	1	27

Q's 81 65 63 56 36 70 70 81 49 56 48 27 62 88 83 1206 -

STATES STILL FOXLESS: DC,DE,HI,KS,LA,ME,MS,NE,NH,RI,SD,VT,WY

```
-- Chris Cartwright, Technical Engineer | ccart@vidtel.com --
-- N3XRV ARRL-VE QRP WAS 27/10(w/c) | http://dns.vidtel.com/~ccart --
-- QRP-L #655 NORCAL #1891 QRP-ARCI #???? NJ-QRP #105 LIQRP #???? --
```

Date: Thu, 4 Dec 1997 05:01:36 GMT
From: adams@chuck.dallas.sgi.com (Chuck Adams)
To: ccart@dns.vidtel.com
Cc: qrp-1@Lehigh.EDU
Subject: [31862] Re: FOX: STATE STANDINGS 1997/98 FOXHUNT
Message-ID: <199712040501.FAA00601@chuck.dallas.sgi.com>

Chris et.al.,

SD and NE will never make it. Been proved that no hams live in those states. :-)

Wait a minute. I'm in MN next week. I'll take the NC40a and drive over to SD and work from the border. :-) But only if it's not cold.

FYI es dit dit
Chuck Adams K5FO CP-60 adams@sgi.com
<http://reality.sgi.com/adams/index.html>

Date: Wed, 3 Dec 1997 20:57:56 -0800 (PST)
From: Stanley Wilson <microres@crl.com>
To: John M Andrews <n5inz@juno.com>
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [31863] Re: Crystal Evaluator Parts Overlay
Message-ID: <Pine.SUN.3.91.971203205730.19549A-1000000@crl5.crl.com>
Mime-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

maybe someone can scan it and post as a .gif or .jpg file. ??

On Wed, 3 Dec 1997, John M Andrews wrote:

> Someone was asking about this.....just ran into an extra copy.
>
> Reply direct.
>
> John- N5INZ
>
>

Date: Wed, 03 Dec 1997 22:21:39 +0000
From: Roger Hightower <n7kt@dancris.com>
To: adams@chuck.dallas.sgi.com
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [31864] Re: FOX: STATE STANDINGS 1997/98 FOXHUNT
Message-ID: <3485DB73.3012212D@dancris.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Chuck Adams wrote:

> Wait a minute. I'm in MN next week. I'll take the NC40a and drive over
> to SD and work from the border. :-) But only if it's not cold.
>

Good luck! I've been in Fargo, ND in the winter, and it's COLD. Not even
for WAS would I go back.

--

72/73, de Roger, N7KT
AK-QRP 167, ARCI 8946, CQC 176, GQRP 9081, NE-QRP 383, NORCAL 1099, QRP-L 62

Date: Wed, 03 Dec 1997 18:49:25 EST
From: k4zd@juno.com (Robert L Hanrahan)
To: qrp-l@Lehigh.EDU
Subject: [31865] FS:OHR Xcvr's
Message-ID: <19971203.200613.7959.0.k4zd@juno.com>

I've managed to obtain an Oak Hills Research
400 (Four Bander) kit and have decided to sell
my two single band OHR 100's (30 & 40 mtrs).
Both rigs exceed five watts out, come complete
with manual and power cord. There are no
surface blemishes. Asking price is just \$82.50
each delivered by USPS or UPS.

Tks for the post-Bob Hanrahan-K4ZD

E-mail: k4zd@juno.com

Date: Thu, 4 Dec 1997 00:59:52 -0500 (EST)
From: ARDUJENSKI@aol.com
To: qrp-1@Lehigh.EDU
Subject: [31866] LADDER-LINE DISCONNECT?
Message-ID: <971204005951_-1138026243@mrin39.mx>

There is a lot of discussion about disconnecting feed lines when lightening is present. What about ladder lines that feed directly into the shack? There doesn't appear to be much literature on the subject.

Just disconnecting in the shack it doesnt seem to resolve the problem because lightening could just follow it into the house anyways. Is it necessary (prudent) to put a disconnect switch outside the house (knife switch) that will ground out the antenna (in addition to an internal disconnect)?

Alan KB7MBI

Date: Wed, 3 Dec 1997 23:06:26 -0700 (MST)
From: Joe Gervais <vole@primenet.com>
To: qrp-1@Lehigh.EDU
Subject: [31867] Re: FOX: STATE STANDINGS 1997/98 FOXHUNT
Message-ID: <199712040606.XAA04125@usr08.primenet.com>

Howdy Folks,

Chuck (K5F0) wrote:

>
> Wait a minute. I'm in MN next week. I'll take the NC40a and drive over
> to SD and work from the border. :-) But only if it's not cold.

Aw c'mon Chuck, where's that FYBO spirit? If you Texans can't take a little cold wx every now and then, you'll never get those juicy temp multipliers. You think if it'd been snowing at the Alamo, Davey Crockett would've called it quits and headed for the fireplace? :-)

Cheers de AB7TT,

-Joe, vole@primenet.com, AZ ScQRPions (Phoenix)

"If it ain't fun, you ain't doin' it right!" -The AZ ScQRPions

Date: Thu, 4 Dec 1997 01:55:19 -0700
From: gsurrency@juno.com (Gary Surrency)
To: ke3nv@erols.com
Cc: qrp-1@Lehigh.EDU
Subject: [31868] Re: Best way to de-flux circuit boards?
Message-ID: <19971204.021709.3446.0.gsurrency@juno.com>

On Wed, 3 Dec 1997 02:32:54 -0500 (EST) Scott Bauer <ke3nv@erols.com>
writes:

> Hello Group,
> What do clean your circuit boards with??

OH NO! Not the dreaded, never ending, frequently occurring, thread on
de-fluxing!

I thought this thread had died the deserved death it is due!

Well, since you *did* ask. I use denatured alcohol, also known as wood
alcohol. Depending on the amount of flux and type of solder, there might
be a white residue remaining that can be removed with a light spray of
Formula 409 and vigorous scrubbing with an old toothbrush. Hold the board
at an angle so the solvent drains to one end as you scrub. Then rinse
with clean water (de-ionized water if you have access to it), and shake
dry or use a low pressure blast of compressed air of 20 psi or less. Be
sure to get under any IC sockets and blow out the thru-plated holes
(vias).

Leave off the components that might be harmed by water until the flux is
removed, then spot clean the remaining solder joints after the
water-sensitive items are mounted. Small areas can be effectively cleaned
with a cotton swab and pure acetone, as that is the solvent in fingernail
polish but acetone has no additives to leave residue. Wal-Mart or any Ace
Hardware store carries acetone. Avoid contact with skin or any plastic
parts that may dissolved with acetone. Denatured alcohol is relatively
safe on most plastics. Acetone if spilled on wood finishes or most
plastics, (like meter faces!) will cause instant damage and teeth
gnashing. Be careful if you choose to use acetone.

I avoid the commercial cleaners such as Flux-Off (tm) because they are
aerosols and waste too much when you use them. Besides, they are waaay
too expensive, thanks to the EPA and other regulations. And the cleaning
agents are typically more hazardous and awful smelling than alcohol or

acetone.

There, I hope I've killed this thread before it takes life again! ;-)

72,

AB7MY

Gary Surrency

Chandler, AZ (Near Phoenix), QRP-L #571, AZ ScQRPions, ARRL VE

Date: Wed, 03 Dec 1997 22:28:59 -0800
From: Monte Stark <ku7y@sage.dri.edu>
To: ARDUJENSKI@aol.com
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [31869] Re: LADDER-LINE DISCONNECT?
Message-ID: <34864DAB.6710@sage.dri.edu>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Hi Alan and all,

Awhile ago, over on the TowerTalk mail reflector, there was a lot of talk about lightening.

When disconnecting antennas, don't forget to disconnect all the power cords, rotor cables, remote switches, telephone lines and any other lines that run out to the towers or other antennas. When lightening striks, it will follow many paths getting to your most expensive box!

You can also read the information from Pollyphaser (sp?). They have a web page and I have also seen ads from them in various magazines.

Enjoy,

--

73, Ron, KU7Y

NRA Life-----Ex W6JX0, DL4RF, N7CRV-----SOWP #5545-M
QRP QRCI #8829----NorCal #330----QRP-L #17-----ARS #49
AR QRP #150-----DM09cg-----New Washoe City, NV

Date: Wed, 3 Dec 1997 23:36:07 -0700
From: "Steve Hurst" <shurst@magiclink.com>
To: <qrp-l@Lehigh.EDU>
Subject: [31870] Grounding Question
Message-ID: <199712040634.BAA63590@nss4.cc.Lehigh.EDU>
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit

Gang,

Since the subject has come up on grounding the antenna/coax and all. Anyone have a ham shack on the second story of their house ? How do you ground your equipment ? Just run a ground wire outside , down the side of the house and onto a grounding rod ? Will the grounding wire become a resonator of any kind ? My first time with the shack up this high off the ground and I wanna do it right !! :-) Any and all tips much appreciated !!
Take care

73,
Steve Hurst
KA7NOC (southern Idaho)
<http://www.magiclink.com/web/shurst>
shurst@magiclink.com

Date: Wed, 3 Dec 1997 23:40:15 -0700
From: "Steve Hurst" <shurst@magiclink.com>
To: <gsurrency@juno.com>, "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [31871] Re: Best way to de-flux circuit boards?
Message-ID: <199712040638.BAA55680@nss4.cc.Lehigh.EDU>
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit

-----Gary wrote, in part-----

>
>
> OH NO! Not the dreaded, never ending, frequently occurring, thread on
> de-fluxing!
>
> I thought this thread had died the deserved death it is due!

hehehehehehehe..... good one Gary !! :-)

73,
steve ka7noc

Date: Wed, 03 Dec 1997 22:40:20 -0800
From: Monte Stark <ku7y@sage.dri.edu>
To: gsurrency@juno.com
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [31872] Re: Best way to de-flux circuit boards?
Message-ID: <34865054.2C56@sage.dri.edu>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Gary Surrency wrote:

>
> On Wed, 3 Dec 1997 02:32:54 -0500 (EST) Scott Bauer <ke3nv@erols.com>
> writes:
> > Hello Group,
> > What do clean your circuit boards with??
>
> OH NO! Not the dreaded, never ending, frequently occuring, thread on
> de-fluxing!
>
> I thought this thread had died the deserved death it is due!

-----snip-----

I love to see these kind of questions being asked every few months.

I tells me one or two things:

- 1) Some new folks have joined the group and haven't seen the other discussions.
- 2) Someone has been here awhile and is just now getting into a position to try building something and needs a little help.

Both of those things are not only good but GREAT for QRP/Ham Radio!

Guess it's a little of the half full / half empty glass!

cul,

--

73, Ron, KU7Y

NRA Life-----Ex W6JX0, DL4RF, N7CRV-----SOWP #5545-M
QRP QRCI #8829----NorCal #330----QRP-L #17-----ARS #49
AR QRP #150-----DM09cg-----New Washoe City, NV

Date: Thu, 04 Dec 1997 02:05:29 -0500
From: "Daniel L. Evans" <dlevans@hsonline.net>
To: qrp-l@Lehigh.EDU
Subject: [31873] Re: FOX: STATE STANDINGS 1997/98 FOXHUNT
Message-ID: <3.0.1.16.19971204020529.350f1928@mail.hsonline.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

whoa! a DXpedition to SD! Imagine the pile up! Good luck Chuck, you
might want to take along some back-up and make it a multi op. hi hi

72/73 de Dan, N9RLA

>Wait a minute. I'm in MN next week. I'll take the NC40a and drive over
>to SD and work from the border. :-) But only if it's not cold.

>

>FYI es dit dit

>Chuck Adams K5FO CP-60 adams@sgi.com

><http://reality.sgi.com/adams/index.html>

>

>

>

Dan L. Evans [N9RLA].....EM78

CQ_DE_dlevans@hsonline.net

Remove the cq_de_ to email me, I hate SPAM!

Date: Thu, 4 Dec 1997 02:19:02 -0600
From: n5inz@juno.com (John M Andrews)

To: qrp-1@Lehigh.EDU
Subject: [31874] Re: Info: Mag wire & torroids
Message-ID: <19971204.021904.3214.9.N5INZ@juno.com>

QST in one of the 1956 issues (Hints & Kinks) suggests that an old hack-saw blade be cut in half and "V" notches be cut in the smooth side with the factory drilled holes as a pivot point with a bolt thru the holes and a thin washer between becomes a wire stripper.

Tried it in reverse (teeth inward) and it seems to do the job on enameled coil wire. Fairly good and no nicks.

72, John-N5INZ

Date: Wed, 3 Dec 1997 23:03:30 -0800
From: ke3fl@juno.com
To: qrp-1@Lehigh.EDU
Subject: [31875] FS: TS-130S Transceiver in very good condition
Message-ID: <19971203.230333.8478.0.ke3fl@juno.com>

Forwarded message:

For Sale: TS-130S Transceiver in very good condition. Has the optional 500HZ CW filter and 1.8 Khz SSB filter installed and has the mobile mike. Does not come with a ACPS but several cables made up to go to your PS or battery are included. \$425.00. Also have the remote VFO VFO-120 that is almost new for \$95.00. All of the above includes shipping to CONUS. Note: this is the 100W output version but can be easily adjusted to 5W by using the carrier level control or even bypassing the PA.

Contact James C. Owen, III, K4CGY, 4253 Buffalo Rd. Mt. Airy, MD 21771
410-635-2989 (H) 301-975-5623 (W) james.owen@nist.gov

--

Jim asked that I forward this to you all. I've seen the rig and used it. It is in very good condition and works well.
73 de KE3FL
Phil K

Date: Thu, 4 Dec 1997 09:10:54 +0000
From: Leon Heller <leon@lfheller.demon.co.uk>
To: kd1jv@moose.ncia.net
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [31876] Re: Market survey, DDS VFO
Message-ID: <Zy3CqQAe0nh0EwRH@lfheller.demon.co.uk>
MIME-Version: 1.0

In message <3.0.1.16.19971203205155.23874b34@mailhost.ncia.net>, Steven Weber <kd1jv@moose.ncia.net> writes

>Howdy Gang,

>

>I'm toying with the idea of producing another DDS VFO based on the Analog
>Devices 9850 DDS chip. I'm just wondering if there are enough people
>interested in such a project to warrant doing it.

>

>Here's what it would do.

>1Hz to 33 Mhz (44 Mhz if I can find 125 Mhz clocks)

I am thinking of doing something similar. I've got some 9850 chips if anyone is interested - my ADI distributor had to order them specially, so I had to buy several. They are a bit of a pain for "ugly" construction prototyping (they are SMD), so I'm going to get some little PCBs made, to bring the pins out to .1" spacing pads. I can then mount the thing directly on a ground plane with the other components, and wire it up to the controller (I'll be using the new Atmel AVR 1200 RISC controller).

I found an ADI app. note. on their web site with a discrete circuit for the 125 MHz osc. IQD in the UK can supply 125 MHz HCMOS osc. modules, but they are on 10 weeks delivery, so I didn't bother. The ADI circuit will give better performance, anyway. I might try a simpler osc. circuit first, just to get the thing working quickly; I've just received a couple of 125 MHz xtals.

>Knob tuned, selectable 1 Hz to 1 Mhz tuning steps, mini 8 X 2 ascii LCD
>display, 50 memories, RIT, XIT, programmable IF offset for super-het
>receivers, digital frequency calibration. Serial control might be also
>available.

>

>It would be built on two pc boards, a Display / Controller board and the DDS
>board. The DDS board would have just the reference clock, DDS chip, output
>buffer and voltage regulator and would be about 3" long and 1.5" high.

>

>I have two possible ways to make the controller board and am having a hard
>time deciding which way to go. One is to make it square, 2.5" X 2.5". In
>this case, the tuning knob would be below the display with some control

>buttons on either side of the display. The other way to go is to put the
>tuning knob to the right of the display. This would make a board 1.5" tall
>and 3.25" long.

>

>There are advantages to both layouts and am wondering which way you would go
>if given the choice. The square display board fits nicely in a cute little
>LMB sloping cabinet. The short but long display board allows for a lower
>profile cabinet. That's the way I went for my little "concept" 9850
>almost-all-band QRP rig. (7 to 21Mhz, continues tuning)

>

>The projected cost is about \$125.00, given the price of some of the parts
>in the expected quantities (small) It would be 2-3 months before the
>product is available, should I go ahead with it.

>

>So, what do you all think? Got to have one, got to think about it, maybe or
>not in the least bit interested? Please let me know, direct.

>

>Thanks and 72,

>Steve, KD1JV....In the White Mountains of New Hampshire

>

>"Melt Solder"

>

--

Leon Heller: leon@lfheller.demon.co.uk <http://www.lfheller.demon.co.uk>
Amateur Radio Callsign G1HSM Tel: +44 (0) 118 947 1424
See <http://www.lfheller.demon.co.uk/rcm.htm> for details of a
low-cost reconfigurable computing module using the XC6216 FPGA

Date: Thu, 04 Dec 1997 06:27:43 -0800
From: Terres Family <terresfm@ncia.net>
To: qrp-l list <qrp-l@Lehigh.EDU>, vole@primenet.com
Subject: [31877] Re: FOX: STATE STANDINGS 1997/98 FOXHUNT
Message-ID: <3486BDDF.532@ncia.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Hmm...It can be warm way down there but..
When the Conquistadors first crossed the Rio Grande they walked their
horses across the ice.

-Jerry AA10F

Joe Gervais wrote:

>
> Howdy Folks,
>
> Chuck (K5F0) wrote:
> >
> > Wait a minute. I'm in MN next week. I'll take the NC40a and drive over
> > to SD and work from the border. :-) But only if it's not cold.
>
> Aw c'mon Chuck, where's that FYBO spirit? If you Texans
> can't take a little cold wx every now and then, you'll
> never get those juicy temp multipliers. You think if it'd
> been snowing at the Alamo, Davey Crockett would've called
> it quits and headed for the fireplace? :-)
>
> Cheers de AB7TT,
>
> -Joe, vole@primenet.com, AZ ScQRPions (Phoenix)
>
> "If it ain't fun, you ain't doin' it right!" -The AZ ScQRPions

Date: Thu, 04 Dec 1997 10:32:31 -0200
From: Carlos Tortonese <tortonese@ciudad.com.ar>
To: qrp-l@Lehigh.EDU
Subject: [31878] 6 mts. rig
Message-ID: <3486A2DE.B8F63F36@ciudad.com.ar>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Where can I find a good kit or diagrams to build a
DSB-CW DC 6mts. QRP Rig ??
an option is a CW-only one
TNX in advance

73,
Carlos, LW2DFM
tortonese@ciudad.com.ar
lw2dfm@qsl.net

Date: Thu, 04 Dec 1997 06:38:15 -0800
From: Terres Family <terresfm@ncia.net>
To: qrp-l list <qrp-l@Lehigh.EDU>
Subject: [31879] Re: Best way to de-flux circuit boards?
Message-ID: <3486C057.39D1@ncia.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

BTW denatured alcohol is ethanol("grain alcohol") that has been made poisonous often by adding wood alcohol (methanol which can cause blindness [gets converted to formaldehyde in the body] if it doesn't kill you) among other things.

Will acetone dissolve polystyrene caps?

Acetone does work well to remove the blue left on the printed circuit board after etching when using the iron on blue sheet method like for the Pixie2 that Frank Matthews shipped.

72 Jerry AA10F

Date: Thu, 4 Dec 1997 06:24:55 -0500
From: "Wilford D. Lindsey" <70511.3041@compuserve.com>
To: "INTERNET:adams@chuck.dallas.sgi.com" <adams@chuck.dallas.sgi.com>, "Doc W.D. Lindsey/K0EVZ" <70511.3041@compuserve.com>,
 QRP-L Discussion Group <QRP-L@Lehigh.EDU>
Subject: [31880] Re: FOX: STATE STANDINGS 1997/98 FOXHUNT
Message-ID: <199712040630_MC2-2AA1-5483@compuserve.com>
MIME-Version: 1.0
Content-Transfer-Encoding: 7bit
Content-Type: text/plain; charset=us-ascii
Content-Disposition: inline

Chuck:

When/where for SD? Might be able to join you. It is only 4-5 hours due west from Rochester. Would be great to join you. Let me know.

BTW, what antenna do you use when portable with the NC40a? Am hauling one to New Orleans this weekend, and still debating the antenna. Looking at W3EDP, but probably something would be better and still packable.

72/73,

--Doc/K0EVZ qrp-l 861 norcal 2050 cqc 414 ARS 311 FISTS 3868 mn-qrp 19
nj-qrp 69 ak/qrp 139 AR QRP 73 ARCI 9398 ARRL WAS 48/40
DXCC 56/42 <>< FOX Total 12/03/97 15 of 18. Was the FOX 11/25/97.

Icom 751A Omni V Sierra Argo 515 Norcal 40a SW-40 49er
Mercury Paddles Emtech ZM-1 MFJ 259 MFJ 941D GAP TNT/2 Windom
SLV/W6MMA G5RV Autek QF-1 RS DSP-40

"Things should be as simple as possible, but no simpler"--A. Einstein

Date: Thu, 4 Dec 1997 06:21:07 -0600
From: Kevin Muenzler <wb5rue@stic.net>
To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [31881] RE: Grounding Question
Message-ID: <01BD007C.CF068E60@SA5399-3-20.stic.net>
MIME-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
Content-Transfer-Encoding: 7bit

On shurst@magiclink.com, Steve Hurst[SMTP:shurst@magiclink.com] wrote:

> Gang,
>
> Since the subject has come up on grounding the antenna/coax and all.
> Anyone have a ham shack on the second story of their house ? How do you
> ground your equipment ? Just run a ground wire outside , down the side of
> the house and onto a grounding rod ? Will the grounding wire become a
> resonator of any kind ? My first time with the shack up this high off the
> ground and I wanna do it right !! :-) Any and all tips much appreciated !!
> Take care
>
>
> 73,
> Steve Hurst
> KA7NOC (southern Idaho)
> <http://www.magiclink.com/web/shurst>
> shurst@magiclink.com
>
>
>

Use a LARGE conductor wire to ground your stuff or 1/2" copper pipe.
If the ground is good and the conductor is sufficiently large you won't
have any trouble with resonance.
I'm sending you an article on grounding and lightning protection that
has some pretty good tips.

Kevin, WB5RUE

wb5rue@stic.net

Date: Thu, 4 Dec 1997 07:44:51 -0500 (EST)
From: Martin Squicciarini <skitch@resuba.com>
To: qrp <qrp-1@Lehigh.EDU>
Subject: [31882] Fox: NOUR
Message-ID: <Pine.LNX.3.91.971204073832.9974A-100000@resuba.com>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Great fox hunt the other night. I used my Royal Blue NorCal Paddles and CMOS II keyer to bag the fox in record time (for me at least). I turned the radio on tuned around for 5 seconds and found the fox calling cq. One call and he came back to me. Exchanged the info. Logged the contact and turned the rig off. Total time 3 minutes. That makes up for all the time I listened to static and never heard the fox.

BTW If you've seen this message before please let me know. I think I'm having a problem with my mailer. TIA

72/73
Marty Squicciarini NR3Z
skitch@resuba.com (home)

Date: Thu, 04 Dec 97 07:04:54 PST
From: Ken Graham <k5id@ipa.net>
To: qrp-1@Lehigh.EDU
Subject: [31883] Lightning Protection
Message-ID: <MAPI.Id.0016.00356964202020203030303430303034@MAPI.to.RFC822>
MIME-Version: 1.0
Content-Type: text/plain; charset=US-ASCII; X-MAPIextension=".TXT"
Content-Transfer-Encoding: 7bit

QRP'ers,

The subject of lightning damage to ham gear is one that will never be totally covered, because of the tremendous voltages and currents involved, as well as the unpredictability.

In my 43 years of hamming, I have had two direct hits by lightning. One in Kentucky, and the other in Texas.

In Kentucky, I had a 40m folded dipole and a six meter beam. The beam higher than the dipole by ten feet, but was apparently not hit. (actually, it may have taken some of the hit but was well grounded, and no damage was found).

The folded dipole was made of open ladder line (the kind with white spacers every six inches). After the strike, the wire had completely disappeared, and the little white spacers were all over the yard...

This antenna was disconnected from the radio, but at the shack end, the lightning jumped from the lead-in to the nearest electrical wall switch. It burned a black trail on the wall (about a foot long) and popped the breaker for that circuit. No damage was done to the radios.

In Texas, I fed a dipole with ladder line.(same kind as above) The strike again vaporized the wire (lead-in) in the attic. This time the radio was attached, and several transistors were blown (thank goodness for Ten Tec service, I was back in operation in two weeks...)

Someone asked about just disconnecting the coax from the radio and leaving it lay on the floor... Well, a friend in Texas did that (the coax was in a roll on the floor - a concrete slab floor). When the lightning hit, it blew a hole in the concrete slab floor the size of the loop of coax on the floor above it! Don't underestimate the power of this stuff...

My current setup for lightning protection is -

Always disconnect coax from the rigs if there is any chance of thunderstorms.

Bond all equip to a common ground point. My ground encircles about half of the house with #4 bare copper, tying 6 ground rods together, including the service ground for ac power.

Disconnect all ac line cords from ac service when not in use. I do this with a small electrical box in the shack. This box has knife switches and totally isolates me from ac mains when open (well, of course an arc could jump across that knife switch if it couldn't find a better path.

I think the answer is to provide a great path for mega amps to ground which does not take it through your equipment...

Regards, Ken K5ID

Date: Thu, 4 Dec 1997 13:42:07 GMT
From: adams@chuck.dallas.sgi.com (Chuck Adams)
To: qrp-1@Lehigh.EDU
Subject: [31884] SD-xpedition
Message-ID: <199712041342.NAA01673@chuck.dallas.sgi.com>

OK gang, hang on. I have to wait til I get there before I call the trip across MN to SD. I looked at the newspaper WX section this morning before leaving the house. Gang, it's getting colder and I see those little white circles representing snow all over the state. Did someone forget to turn up the heater?

I'll post on Tuesday of next week as to the state of the union. Even with good weather is quite a drive from Minny/StP to the border and I'm not as young as Davey Crockett was anyway. ;-)

I will have the NC40a/KC1 with gel-cell, K8FF paddle, and HB dipole with me in any case. So 100' of MN will become annexed to TX for a period of time if I can catch the fox. :-) ;-) Just kidding, just kidding.....

There will be a Pizza night next week so stay tuned to an announcement for show-and-tell next week by the entertainment committee in MN. I'll be over by the airport at the Holiday Inn Select (612) 454-3434 if I don't miss the plane on Monday night at DFW coming back from Phoenix.

dit dit

Chuck Adams K5FO CP-60 adams@sgi.com
<http://reality.sgi.com/adams/index.html>

Date: Thu, 4 Dec 1997 07:42 CST
From: FAITHD@dnr.state.wi.us (Don C. Faith III, AM/7, \ (608\) 267-3135)
To: aa8yo@tir.com
Cc: qrp-1@Lehigh.EDU
Subject: [31885] Re: WBL Paddles
Message-ID: <009BE410950F2B37.AF54@dnr.state.wi.us>

Hi Bob (et al)

I called Stan up earlier this week. Apparently there have been some difficulties lately but he has been able to resume working on our paddles. Said he just sent out for 200 bases (which he has made by a machine shop) and hopes to start shipping a bunch out soon.

I have been waiting for 18 weeks myself.

73 de N9WR; Don C. Faith

Date: Thu, 4 Dec 1997 08:42:09 EDT
From: "CHARLES LESKIE" <CLESKIE@um-f1.umd.umich.edu>
To: qrp-1@Lehigh.EDU
Subject: [31886] Re: straight key
Message-ID: <5293DEB2346@um-f1.umd.umich.edu>
MIME-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7BIT

> Date sent: Wed, 03 Dec 1997 19:13:33 -0500
> Send reply to: wb1edi@scoot.netis.com
> From: The Whittemores <wb1edi@scoot.netis.com>
> To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
> Subject: straight key

> -----<cut here>-----
> What kind of knob do you prefer?
> a) flat,
> b) round,
> c) round with skirt (e.g. "Navy" knob) yes i was in the navy
> d) other -- please describe.
>
> Do you have a size preference for the knob? If so, do you prefer
> a) a small knob (3/4" diameter or less), or
> b) a large knob (diameter greater than 3/4"). thats mine
>
> What distance do you prefer to have the knob above the operating
> surface?
> a) half an inch or less and again
> b) more than half an inch.
>
> What is your usual (or most comfortable) sending speed with a
> straight key?
> ----->

You might wish to consider a bencher RJ-2. I have used several different straight keys, and felt this was the best of the bunch. For three years, I used nothing but straight keys, and experimented with several, and my chrome RJ-2 was far more pleasing to use than the others. To me fast cw on straight key is about 20 wpm. I could send at 20 wpm on that hand key for short periods of time before my fist gave out and 13 to 15 wpm for longer periods of time. Several people who I worked with it actually thought I was pulling their leg when I told them I was on a straight key. I finally got tired of killing my wrist trying to keep up with people running keyers, and bought a set of paddles, but I still use the straight key for slow code operations and really enjoy using it. Its a nice heavy key, it wont bounce around much, it has a big knob on it, and very smooth keying action and well balanced.>

Chuck Leskie

Date: Thu, 4 Dec 1997 08:50:54 -0500 (EST)
From: "John T. Croteau" <johnc@geekopolis.com>
To: qrp-1@Lehigh.EDU
Subject: [31887] Minnesnowta Hubbabaloo
Message-ID: <Pine.BSF.3.95q.971204084542.19568A-100000@uilen.pair.com>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Hey! What's the deal?

Now, I know I have been away from the shack for 4 years but that is no reason to keep me out of the loop.

What is going on here in Minnesnowta that I was not aware about and why do we have all these great QRP ops flying in from the great unknown? I am kinda getting tired of all the sun-bums whining about the cold, I tell you what (sorry, lame King of the Hill impersonation attempt). ;-P

Anyhow, whatever it is.. someone clue me in. ;-) BTW, it is not cold here.. I was on my roof yesterday running a new feedline for my equipment

that should be arriving next week. Anxiously awaiting to get back on the air.

73

\\ John T. Croteau, A.R.S. KA1VIX
\\\\ Mound, Minnesota johnc@geekopolis.com

Date: Wed, 03 Dec 1997 21:12:23 -0500
From: Paul Helbert <phelbert@rica.net>
To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [31888] Trade? 1 k ten turn pot for 10 k
Message-ID: <34861187.DB6539DA@rica.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Hi gangue,

I have several nice, small (mod 536 Spectra 5% linear) ten turn 1 k pots. These have 1/4" shaft, less than 1"x1" behind the mounting panel. I need a 10 k ten or 15 turn pot of similar small size. Anyone want to swap? Anyone want to sell?

TU es 73,

Paul, Wv3j

Date: Thu, 04 Dec 1997 08:17:09 -0600
From: "Rattray, Bruce" <Rattray@siast.sk.ca>
To: "'QRP-L'" <qrp-l@Lehigh.EDU>
Subject: [31889] N7ML?
Message-ID: <ABB04875E11AD01191A40000F83092BE566F43@stone.siastr.sk.ca>
MIME-version: 1.0
Content-type: text/plain
Content-transfer-encoding: 7BIT

Anyone know N7ML?...I was practising copying code the other night while

Fox HUNting and this "hugegly awesome" signal (isn't that what the kids say these days?) came on around 7.007 MHz so I copied some of it...this chap is from Montana, I believe...he was working DX stations...so I wondered if I could hear the DX stations as well...yes, some of them a little bit...but then came the surprise for me...if I copied correctly, N7ML is runnning yagis, 3 over 3 over 3 on a 195 foot tower!?!....WOW!....where's my Christmas list?...scramlbe, flip,flip,flip, page 10...ok, item 200...new location outside the city, at least 5 acres of land, 200 foot trees72 - Bruce(VE5RC)

Date: Thu, 4 Dec 1997 10:22:17 -0500 (EST)
From: "Scott Rosenfeld [NF3I]" <ham@w3eax.umd.edu>
To: "Rattray, Bruce" <Rattray@siast.sk.ca>
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [31890] Re: N7ML?
Message-ID: <Pine.LNX.3.95.971204101908.28044C-1000000@w3eax.umd.edu>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

That's Mike Lamb, grid DN45 (if I remember right), the only double-hop 6m Es signal I've ever heard on my attic dipole.

Remember AEA? That was his company.

Remember there was a picture on the cover of QST? Something like "DX from the Big Sky Country?"

That was Mike. Monster towers in Big Sky. Huge signals everywhere he goes.

Worked YU7-land QRP this morning on 15 on the way to work.. Things are absolutely, positively looking up.

* Scott Rosenfeld NF3I Burtonsville, MD FM19mc QRV 80-10/6/2/440 *
* 6m 80 grids on 8w * DXCC WAS WAC * QRP-L #147 * QRP ARCI #9054 *
* Charter member, Maryland Milliwatters * W3-VK on 3w mobile CW *
*** 301-549-1022 h / 301-982-1015 w ** Life is one big hamfest ***

On Thu, 4 Dec 1997, Rattray, Bruce wrote:

> Anyone know N7ML?...I was practising copying code the other night while
> Fox HUNting and this "hugegly awesome" signal (isn't that what the kids
> say these days?) came on around 7.007 MHz so I copied some of it...this
> chap is from Montana, I believe...he was working DX stations...so I
> wondered if I could hear the DX stations as well...yes, some of them a

> little bit...but then came the surprise for me...if I copied correctly,
> N7ML is running yagis, 3 over 3 over 3 on a 195 foot
> tower!?!.....WOW!.....where's my Christmas list?...scramlbe,
> flip,flip,flip, page 10...ok, item 200...new location outside the city,
> at least 5 acres of land, 200 foot trees72 - Bruce(VE5RC)
>

Date: Thu, 4 Dec 1997 06:11:22 -0800 (PST)
From: Stanley Wilson <microres@crl.com>
To: qrp-1@Lehigh.EDU
Subject: [31891] K06KA's 2n2222 web page URL ?
Message-ID: <Pine.SUN.3.91.971204061026.17058A-100000@crl.crl.com>
Mime-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Anyone have Rob's 2n2222 web page URL ?

Thanks, de stan

Date: Thu, 4 Dec 1997 09:45:46 -0500 (EST)
From: K5BDZ@aol.com
To: k5id@ipa.net, qrp-1@Lehigh.EDU
Subject: [31892] Re: Lightning Protection
Message-ID: <971204094545_-1238552897@mrin44.mail.aol.com>

Ken

Great post!!!

Your words should greatly put into perspective the danger and power of lightning! Hope all read and adhere.....and plan ahead!

Bill, K5BDZ

Date: Thu, 04 Dec 1997 09:00:27 -0600
From: Stan Wilson <microres@crl.com>
To: qrp-1@Lehigh.EDU
Subject: [31893] 2N2222 Contest - Reflex Amplifiers and QRP design
Message-ID: <3486C58B.7917@crl.com>
MIME-Version: 1.0

Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

The NorCal 2N2222 design contest hit the proper cord with this operator. The dust came off of the text books and even pulled the slide rule out of the drawer. (Defination: Slide Rule - Wooden Sticks marked with a scale based on logarithms. Used by early caveman to design the wheel.)

Quickly the notebook was filled with schematics to try. In this rush to madness the product detector output level did not match the input of the audio output stage. Now how could one increase the detector output to the necessary drive level without adding additional transistor stages.

A quick scan of the ARRL and QRP publications did not yield a solution. Even a search of my hero, Frank Jones' handbook didn't solve my problem.

It was becoming obvious that in this modern era of the I-net that I was not using the proper search word. After all someone had to have had this problem in the past.

As with many design problems the solution came in flash during a deep sleep. The word was "REFLEX". A reflex amplifier is one which is used to amplify at two frequencies - i.e. RF and audio.

The solution was to take the output of the detector and fed it back through the IF stages for additional amplification before applying to the audio output stage. Yes I have a few problems, bias, coupling, level control, etc.. But the solution is there. The devil is in the details.

Reflex based radios were the rage in the early and mid 1930's. They offered high sensitivity. The use of an RF stage twice or make the IF stages do double duty as the audio amplifiers has great appeal in the design of today's portable qrp sets.

Next design problem ? If I use AVC will it adjust the rf level of the IF amplifiers or will it adjust the audio level of the IF amplifiers being used as audio amplifiers. Details, details.... Don't bother me with the details. :-)

Cheers, Stan AK0B

Date: Thu, 4 Dec 1997 11:26:52 -0500 (EST)
From: "Scott Rosenfeld [NF3I]" <ham@w3eax.umd.edu>
To: qrp-l <qrp-l@Lehigh.EDU>, eax@w3eax.umd.edu, Chris Cartwright

<ccart@dns.vidtel.com>, w6toy@erols.com, k3tks@abs.net, wa8mcq@abs.net,
Laurel ARC <larc-1@webtrek.com>, Niel Skousen <nskousen@scientech.com>,
vg10@umail.umd.edu, esmith@mc.cc.md.us, jlee1@erols.com, pvr@qth.net
Subject: [31894] DC/VA/MD QRP Show & tell & dinner, Friday December 5th
Message-ID: <Pine.LNX.3.95.971204105816.28275B-100000@w3eax.umd.edu>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Do you have an interest in QRP? Are you hungry for some good pizza?

FRIDAY, DECEMBER 5, 7:30 p.m.

It's Later because of the greater distances required to be covered, and the increased possibility that WA7SSA will be able to attend after his meetings (visiting from Eye-da-ho).

After a MYRIAD of complaints about the inconvenience of locating the DC area get-togethers in Laurel or elsewhere, I have taken the opportunity to

MOVE

this one further north. Equidistant from Germantown, Tyson's Corner, DC, and Laurel.

Giuseppe's Pizza Plus
213 N Washington St.
Rockville, MD 20850-1702
301-424-0413

This is in downtown Rockville, in the shopping center with Magruder's supermarket.

I-270 to Falls Rd. (189) exit, north.
Left on S. Washington St., which becomes N. Washington...

>From Rt. 355, you're on your own. If you can handle 355, you can CERTAINLY find this place :)

(trust me, I'm from Noo Yawk, and this is some SUPERB pizza, or at least it was last time I was there a month ago...and it's still in business...)

Good food, good people, BRING YOUR TOYS! Niel will have his THP-750 with him (assuming he doesn't get called into work).

See you there! (if you want to carpool from Laurel, contact me)

(no amplifiers allowed through the door, please)

* Scott Rosenfeld NF3I Burtonsville, MD FM19mc QRV 80-10/6/2/440 *
* 6m 80 grids on 8w * DXCC WAS WAC * QRP-L #147 * QRP ARCI #9054 *
* Charter member, Maryland Milliwatters * W3-VK on 3w mobile CW *
*** 301-549-1022 h / 301-982-1015 w ** Life is one big hamfest ***

Date: Thu, 04 Dec 1997 10:53:39 -0500 (EST)
From: Philip Karras 827-2956 <PXXK4@CDRH.FDA.GOV>
To: n2cq@comten.com, qrp-1@Lehigh.EDU
Subject: [31895] Re: MFJ Vertical
Message-ID: <C42ZXDJFJX19*/R=FDADR/R=A1/U=PXXK4/@MHS>
MIME-version: 1.0
Content-type: TEXT/PLAIN; CHARSET=US-ASCII

Ken, if you had RF in the shack due to the antenna, there was probably RF on the coax shield. In which case the SWR measurement was in all likelihood bogus. You need to first insure no RF on the shield, use some type of balun, then measure the SWR. For all you know, you might have had 1:1 with a proper installation.

72 & 73 de KE3FL
Phil K

W: pxk4@cdrh.fda.gov
H: ke3fl@juno.com
O: ke3fl@yahoo.com

Date: Thu, 04 Dec 1997 16:04:52 +0000
From: Ed Loranger <we6w@qsl.net>
To: LAGESON@worldnet.att.net
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [31896] Re: FOX Report-NOUR/ Correction and K8FF Paddle NOTE!
Message-ID: <3486D4A4.1219@qsl.net>
Mime-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Jim, the Bushy-tailed Fox from MN Copied Correctly:

> 25 WE6EM 549 CA ED 1068

That's right. The K8FF Paddles sent WE6EM, although I sent WE6W. I thought I had corrected my call, or Jim knew who I was, but alas there is that call my paddles sent....

Please make that WE6W, ok Jim?

NOW: Note I said "The paddles sent the call". Well, it is true. I am posting a separate note to the list about the paddle.

Thanks for an excellent job Jim!

>

> 72's Jim...NOUR #7NN

--

72/73 de we6w qrp es cw ONLY (From non-ham to extra in one day!)
HW-8,0HR-100, Pixie2, Johnson Viking II, Drake TR-3
QRP-L#1068,ARCI#9397,Norcal#2227,ARS#275,AR#112 grid CM88ok
mailto:we6w@qsl.net <http://www.qsl.net/we6w>

Date: Thu, 04 Dec 1997 12:07:41 -0800
From: JIM KW3U <kw3u@warwick.net>
To: wb1edi@scoot.netis.com
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [31897] Re: straight key
Message-ID: <34870D8D.1492@warwick.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

The Whittemores wrote:

>

> -----<cut here>-----> d) more than 20 wpm

>

> my favotite key is an old navy sealed contact key with the marking se1443 a

>

> ive also got nye viking keys and a j38 lionel key.

>

> does anyone have any info on the navy key?

>

> good luck

> 73 de wb1edi

> Barry L Whittemore

HI BARRY, I use a sealed navy key, it is called a flameproof, and a few years back I managed to buy one new in the box with the complete paperwork. I really enjoy that one, my original one was used and abused and would occasionally stick, so it sits gathering dust. Can make copies of the parts blowup and stuff that came with it for anyone wanting it. 73 Jim KW3U

Date: Thu, 04 Dec 1997 18:16:25 +0800
From: "W. Daniel, 9V1ZV" <daniel@pandora.lugs.org.sg>
To: qrp@pandora.lugs.org.sg
Subject: [31898] MAR-8
Message-ID: <348682f9.pandora@pandora.lugs.org.sg>

Hi,

Sometime ago someone sent me information as to where I can get hold of some MAR-8 but I seem to have lost the e-mail. Can the kind soul please re-send me the info, or if you just happen to know where I can get 1 or 2 of them, I'd appreciate the pointer. Thanks in advance.

73 de 9V1ZV Daniel

--
+-----+-----+
Daniel Wee	daniel@pandora.lugs.org.sg
9V1ZV	
QRP-L #667	9V1ZV@amsat.org
+-----+-----+

Date: Thu, 04 Dec 1997 16:13:17 +0000
From: Ed Loranger <we6w@qsl.net>
To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [31899] K8FF Paddle NOTE!
Message-ID: <3486D69D.1420@qsl.net>
Mime-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Folks, I have been having intermittent problems keying lately, but Jim's log entry made me research what was going on.:

> 25 WE6EM 549 CA ED 1068

That's right. The K8FF Paddles sent WE6EM, although I sent WE6W. I thought I had corrected my call, or Jim knew who I was, but alas there is that call my paddles sent....

NOW: Note I said "The paddles sent the call". Well, it is true.

After checking out my keyer and associated cables etc. Polishing up the stainless contacts with 1000 grit sanding stone, I still had a problem with the "Dah" paddle.

Background: I love these Norcal/K8FF Paddles. When I opened up my kit and started building, I noticed that one of the Bearings was smaller than the other. They should be identical. I installed the smaller bearing the Dah shaft. Because of the smaller bearing the paddle has vertical play, even with the micrometer measured .001 tolerance between the bearing height and the shaft.

I mentioned in an earlier post, my concern of the ground path which is: Stainless Contact, thru arm, Bearing, brass washer, allen screw, BASE.

Sure enough, the extra space within the paddle arm due to a smaller bearing has resulted in intermittent contact ground.

Last night I blew A very nice Chat when the problem went from very intermittent to often. I bet that guy thinks I'm a clown...

I have patched a small wire from the center block to the paddle arm screw/nut to guarantee a grounded arm.

I have not had any problems with this since. After adding the wire I ran through the alphabet about 30 times plus numbers. Then I sent CF CF CF and CL CL. These were the best I found for testing any transitions.

I am hoping that replacing the bearings with ball bearing races will totally eliminate this problem. Otherwise I am devising a more pleasing to the eye wiring solution.

No, you can't have my K8FF/Norcal paddles!

Cordially and curiously strong 74.

-Ed

--

72/73 de we6w qrp es cw ONLY (From non-ham to extra in one day!)
HW-8,0HR-100, Pixie2, Johnson Viking II, Drake TR-3
QRP-L#1068,ARCI#9397,Norcal#2227,ARS#275,AR#112 grid CM88ok
mailto:we6w@qsl.net <http://www.qsl.net/we6w>

Date: Thu, 4 Dec 1997 8:43:00 -0600
From: Bob Tellefsen-CNSE97 <Bob_Tellefsen-CNSE97@email.mot.com>
To: qrp-l@Lehigh.EDU
Subject: [31900] Re: N0UR Fox
Message-ID: <M2336183.017.ocfq.1.971204165745Z.CC-MAIL*/OU=LMPCC4/OU=ILBB/
PRMD=MOT/ADMD=MOT/C=US/@MHS>

Jim:

That was a mighty thin contact, but I'm glad we made it. I wasn't
sure it had taken, so later on I called you again. When you replied,
"DUPE", I went away happy.

Hope you had a fun time as Fox.

72, Bob N6WG and 01' Kenwood

Date: Thu, 4 Dec 1997 11:58:02 -0600
From: Mike Broga <mbroga@cu-online.com>
To: qrp-l@Lehigh.EDU
Subject: [31901] MFJ mods posting
Message-ID: <199712041758.LAA13663@mail.advancenet.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Hello group,

Last week someone posted a list of mods and adjustments for the MFJ9000
line. My big fast fingers deleted it. If possible could the poster please
send it to me.

73

Mike, W9KVF

Kenneth M.(Mike) Broga W9KVF
HAL Communications Crop. Phone: 217 367-7373
1201 West Kenyon Road Fax: 217 367-1701
Urbana, IL 61801 BBS: 217 367-5547

Email: mbroga@halcomm.com
WWW: <http://www.halcomm.com>

Date: Thu, 04 Dec 1997 11:14:16 -0600
From: John Sullivan <sullivjd@sound.net>
To: qrp-1@Lehigh.EDU
Subject: [31902] Re: Lightning Protection
Message-ID: <3486E4E7.340A@sound.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Ken Graham wrote:

>
> QRP'ers,
>
> The subject of lightning damage to ham gear is one that will never be
> totally covered, because of the tremendous voltages and currents
> involved, as well as the unpredictability...

Interesting thread...here's a thought...Lightning can be your friend.
When I was 14 and WNOATO and operating 40 CW with a beatup Hallicrafters
RCVR, homebrew XMTR, and a long wire Lightning paid me a visit. Melted
everything. My dad called the insurance guy (may have been a ham?). He
came out and asked what was this puddle? And this blob? And this was a
power supply? We showed him some schematics and some B&A receipts, he
scribbled some notes, and handed over a refund that knocked our socks
off. Lightning meant serious equipment upgrade. Hotcha!

I gained a fear of and a deep appreciation for Lightning. I think
everyone should start their ham careers with a direct hit. Taught me
about grounding. I place a bowl of fruit at the base of my tower every
so often just in case Lightning makes another pilgrimage to my home.

de kg@mz

Date: Thu, 4 Dec 1997 09:11:38 -0800 (PST)
From: "S. Lee" <slee@u.washington.edu>
To: Leon Heller <leon@lfheller.demon.co.uk>
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [31903] Re: Market survey, DDS VFO
Message-ID: <Pine.A41.3.95b.971204085104.96818A-100000@homer06.u.washington.edu>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

There's a company called Technological Arts located in Toronto, Ontario, that sells a good quality PLCC to breadboard adapter. Adapters for 44-pin and 52-pin PLCC chips are \$10.50US and \$12.00US respectively. They have a web page at <http://www.interlog.com/~techart/myfiles/t3.html>

There are two caveats here; When I purchased a batch of 84-pin adapters last year there were no pin identifiers silkscreened on the boards. So I called them and suggested they do this, which they did. So this year I ordered another batch and yes the pins are numbered, but some are numbered incorrectly :(The second caveat is that Canada Post has been on strike which is why half my order (placed in October) has yet to arrive. Enjoy!

de AB7HI, Stephen Lee, Federal Way, WA
slee@u.washington.edu

Date: Thu, 4 Dec 1997 12:13:06 -0500
From: "david's" <elim@ime.net>
To: <mbroga@cu-online.com>, "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [31904] Re: MFJ mods posting
Message-ID: <01bd00d7\$e35af6c0\$2ec65ad1@default>
MIME-Version: 1.0
Content-Type: text/plain;
charset="US-ASCII"
Content-Transfer-Encoding: 7bit

and I missed it too would like to have it , dave

-----Original Message-----

From: Mike Broga <mbroga@cu-online.com>
To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Date: Thursday, December 04, 1997 11:58 AM
Subject: MFJ mods posting

>Hello group,
>
>Last week someone posted a list of mods and adjustments for the MFJ9000
>line. My big fast fingers deleted it. If possible could the poster please
>send it to me.
>
>73
>
>Mike, W9KVF
>*****
>Kenneth M.(Mike) Broga W9KVF
>HAL Communications Crop. Phone: 217 367-7373
>1201 West Kenyon Road Fax: 217 367-1701
>Urbana, IL 61801 BBS: 217 367-5547
>
>Email: mbroga@halcomm.com
>WWW: <http://www.halcomm.com>
>*****
>
>
>

Date: Thu, 04 Dec 1997 17:24:50 +0000
From: Ed Loranger <we6w@qsl.net>
To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [31905] Re: K8FF Paddle NOTE!
Message-ID: <3486E762.13AF@qsl.net>
Mime-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

000, 00h! Forgot to share with y'all what I did to make the
stock plastic paddles look like diamonds!!!

First of all, don't even think of asking me to use a flame on
plastic. I hate anything that can't easily be undone.

The objective here is to remove all of the chips and blemishes on the edges of the stock plastic paddles.

OK. I have this very awesome knife sharpening kit my buddy got me for Christmas about 3 years ago. Had 5 stones set in plastic handles, and these little rods that are clamped in, setting the angle.

Grades are 60,140,320,600,1000 grit. After using the 600 and 1000 on the stainless contacts and seeing the shine, I used Paul's, NA5N, water trick. I wetted the stone and brushed it across the dull paddle edge. Really shined up great! So I went from course to 1000 grit on all edges and now the darn thing is ready for the display case!

An added benefit over sandpaper is that the stone is flat and square and easily maintained the edges of the stock paddle, my goal.

XYL thinks I spend Waaay to much time on these things....

Holiday Cheers!

-Ed Loranger, we6w, we6em when paddles used to stick :)

--

72/73 de we6w qrp es cw ONLY (From non-ham to extra in one day!)

HW-8,0HR-100, Pixie2, Johnson Viking II, Drake TR-3

QRP-L#1068,ARCI#9397,Norcal#2227,ARS#275,AR#112 grid CM88ok

mailto:we6w@qsl.net <http://www.qsl.net/we6w>

Date: Thu, 4 Dec 1997 11:18:59 -0600
From: Tom Moll <tomm@xata.com>
To: "'qrp-l@lehigh.edu'" <qrp-l@Lehigh.EDU>
Subject: [31906] Palmtop Computers
Message-ID: <01BD00A6.6EBEEFA0@TOMM>
MIME-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
Content-Transfer-Encoding: quoted-printable

Has anyone had a chance to compare the general level of RFI generated by = the small palmtop computers like the HP or Cassio running Windows CE, = compared to the average desktop unit? I see that the new HP 360 (and = earlier models too I think) use a 60 MHz RISC processor - i.e., are not = X86 based devices. It would seem that these units may not be very well = shielded, but would be a nice QRP station accessory if they don't put = out more RF than the QRP rig. I'm not looking for a scientific study = (unless someone has one), just any observations that anyone has made. = TIA,

for Circad that has a better manual or faq? Thanks for your help. 72,
Doug, KI6DS

Date: Thu, 04 Dec 1997 17:43:51 +0000 (GMT)
From: Kevin Muenzler WB5RUE <wb5rue@amsat.org>
To: qrp-l@Lehigh.EDU
Subject: [31909] RE: Lightning Protection - long (25k)
Message-ID: <19971204.174351.wb5rue@amsat.org>

Due to the large volume of messages regarding lightning and grounding
I think it would be good to post this message to the entire list.

Kevin, WB5RUE
wb5rue@amsat.org

=====
ARRL Technical Information Service
Lightning Protection Information

file: lightnin.txt
updated: 01-09-95
Author: Michael Tracy, KC1SX (email: tis@arrl.org)

Reprinted from: October 1994 QST "Lab Notes: Lightning Protection - Part 1"
and December 1994 QST "Lab Notes: Lightning Protection - Part 2"
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American Radio Relay League, 225 Main St., Newington, CT 06111
(email: mtracy@arrl.org).

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Lab Notes, Lightning Protection - Part 1

By Mike Tracy, KC1SX
Technical Information Services Coordinator

Q: I haven't had any lightning problems yet. Why do I need protection?

A: When most hams think of lightning protection, they immediately think about ways to protect their station equipment. Although that is certainly important, you should have far more concern for the health and welfare of yourself and your family. Each year, lightning is responsible for the deaths of over 400 people in the US. Several hundred more suffer from injuries caused by lightning, such as burns, shock and other damage to the body's more vulnerable parts.

Q: How much of a threat do I face?

A: The number of local thunderstorm days per year in this country ranges from 1 to 100, depending on where you live. If you live in a location with a single thunderstorm day, that means that you have at least one opportunity for disaster to strike. The total number of strikes per year is more than 40 million. However impressive these statistics may seem, keep in mind that they do not include all lightning strikes. Lightning can occur even without a thunderstorm - whenever and wherever there is a sufficient charge build-up.

Many things are involved in determining the likelihood of a strike at your QTH. A brief list includes the type of structure, the materials it's made of, the location relative to other structures and so on. One way to gauge your level of risk is to go through the Risk Assessment guide found in the back of the National Fire Protection Association's Lightning Protection Code (see address below). This appendix contains an equation that you can use to determine your overall risk of being struck.

Other reasons for lightning protection include fire prevention and protection of sensitive electronic equipment. Property damage statistics indicate that lightning causes over 40 million dollars damage annually to buildings and equipment in the US.

In addition, your equipment can also be damaged by other electrical disturbances such as power line switching transients and voltage surges, as well as static build-up on outside wires and antennas.

Q: But I already have lightning protection. My station is grounded and I

added a lightning arrestor to the coax.

A: Your situation is typical of many hams: a single copper rod driven into the earth as a station equipment ground and an in-line coax lightning arrestor, often mounted in the shack at the operating position. For lightning protection this sort of installation is not adequate. It may even be an invitation to disaster.

Q: So what can I do?

A: Education is the key. Lightning protection is no different from any other complex technical problem; the more you know, the better you will be at making decisions about the protection you need. In this case, however, the local library may not have the information you are looking for. While most libraries have information on lightning as a natural phenomenon, only a few will have anything on lightning protection.

A good source for this information is PolyPhaser Corporation. Although this company is in the business of manufacturing lightning-protection devices, the information they offer on installations goes far beyond product promotion. PolyPhaser's book, The "Grounds" for Lightning and EMP Protection, is second to none for comprehensive, easy-to-understand information on grounding systems for lightning. PolyPhaser also has a quarterly newsletter, Striking News, that has articles on lightning protection devices and techniques. The February and May 1994 issues of Striking News contain articles on Amateur Radio station protection. Complimentary copies of these issues are available from PolyPhaser.

Another good reference is the NFPA Lightning Protection Code (NFPA 780) that I mentioned earlier. In addition to the Risk Assessment Guide, this full-size booklet (44 pages) contains information on terminology, materials and techniques used for lightning protection systems. Bear in mind, however, that this guide is intended for use by professionals; local building codes may require that some parts of the installation be performed by professionals. As the code says, installations must be approved by the local authority having jurisdiction.

Q: Sounds like good information. Do you have any other sources?

A: I sure do! See the list of lightning protection information sources below.

Q: Once I've read all about lightning, what steps should I take first to add protection to my shack?

A: The most important thing to do is to keep lightning outside of your home.

This includes disconnecting your equipment from the feedlines and power sources, providing a proper station ground and adding protective devices to your installation.

As the ARRL Antenna Book states, "The best protection from lightning is to disconnect all antennas from equipment and disconnect all equipment from power lines." When lightning strikes, it will always try to find the shortest electrical path to ground. Unless you disconnect your station equipment, you're giving the strike a good return path through your equipment!

The easiest way to remember to do this is to disconnect your station whenever you're not using it. To prevent lightning from using your feedlines as a sneak path into your shack, disconnect them outside. If you disconnect your coax and leave it lying on the floor, lightning can jump a gap of several feet to your grounded equipment. Remember that it has already traveled quite a distance through the air. A few more feet of atmosphere won't stop it (this phenomenon is known as a "side flash").

Install an entrance panel for your feedlines and control cables. Place the panel ground connection on the outside of your home. Don't attach it to an inside source such as the power company ground or a cold water pipe. This panel will provide a convenient disconnect point for your equipment, as well as a place to mount feedline and control cable transient protectors.

Q: I can do that. But what about my station ground system?

A: Proper grounding is critical to lightning protection. Lightning contains energy in a wide range of frequencies (which is why you can hear "static crashes" on an AM radio when a storm approaches). You must provide a low-impedance path to ground for the energy.

A single ground rod will not suffice as a lightning ground. The basic idea is to give the strike energy a place to dissipate. Given the number of station-configuration possibilities, there are too many different ground system requirements for me to detail here. The issues of Striking News that I mentioned earlier contain information on grounding ham installations.

Q: You also mentioned protective devices. Can you tell me more about those?

A: Products for lightning protection include feedline transient protectors, power line transient and surge protectors and transient protectors for rotor control boxes and telephone lines. Each of these devices is designed for a specific job and you should always select the correct product for each line you're trying to protect. I'll provide more details about these devices next time. For now, you should be aware that the quality and type of products is critical for proper protection.

In the second installment of this two-part Lab Notes series, I'll discuss the techniques and products you can use to protect your home. In addition, I'll provide a list of manufacturers of lightning-protection products.

Thanks to ARRL Technical Adviser John Bittinger, KI7GW, for his assistance during the preparation of this column.

Lightning Protection Information

The ARRL Antenna Book

The ARRL Handbook (Electrical Safety chapter)

Striking News, February and May, 1994; "Ham Radio Station Protection";

PolyPhaser Corporation, PO Box 9000, Minden, NV 89423-9000

The "Grounds" for Lightning and EMP Protection; PolyPhaser Corporation

Lightning Protection Code (NFPA 780-1992); National Fire Protection

Association, PO Box 9101, Quincy, MA 02269-9101

LPI Installation Code (LPI 175); Lightning Protection Institute, 3365 N.

Arlington Hts Rd, Suite J, Arlington Heights, IL 60004.

Installation Requirements for Lightning Protection Systems (UL 96A);

Underwriters Laboratories, 333-T Pfingsten Rd, Northbrook, IL 60062

National Electrical Code (NFPA 70-1993); National Fire Protection Association

Lightning and Lightning Protection; D. W. Consultants, Inc, State Route 625,

PO Box D, Gainesville, VA 22065

Lab Notes: Lightning Protection - Part 2

By Mike Tracy, KC1SX,

Technical Information Services Coordinator

Q: I want to protect my station against lightning. What's the best way?

A: There is no single "best way." In this column, continuing where we left off in October, I'll describe products and methods for lightning control and tell you how they're applied in general terms. However, every amateur station is unique and there are no solutions that apply to all installations. You really need to consult the experts for specific applications.

Q: But how do I find an expert?

A: Start with your local government. Find out what building codes apply in your area and have someone explain the regulations about antenna installation and safety. I'll also list several companies that sell lightning-protection products. Some of these companies offer considerable help in determining how their products should be applied to a specific installation. The yellow pages of most telephone directories will provide a list of professional engineers,

lightning protection suppliers and contractors who can give you advice and assistance. Contact your ARRL Section Manager or Technical Coordinator. They may be able to direct you to an ARRL Technical Advisor or other knowledgeable ham in your area.

Q: I'll do that, but I want to know more so I can talk to them intelligently. Where do I begin?

A: Before I get into the "how-to" part, we need to look at some of the more common materials used for lightning protection.

Grounding materials are available from a variety of sources. In addition to your local hamfest, check building-supply and electrical-supply stores. Ground rods should be either solid copper, copper-clad steel, hot-dipped galvanized steel or stainless steel. They shouldn't be smaller than 8 feet in length and 1/2 inch in diameter.

Copper strapping (or flashing) comes in a number of sizes, but a strap 1-1/2 inches wide and 0.051 inch thick is the minimum recommended for ground connections. A copper strap makes a better lightning and RF ground than a wire because of its lower inductance. On the other hand, it's more expensive and harder to find.

Bare copper should be used for buried ground wires. There are some exceptions for corrosive soil; an expert's advice may be required. Exposed runs above ground that are subject to physical damage may require additional protection (a conduit) to meet code requirements. The size you should use depends on the application, but never use anything smaller than #6 AWG for bonding conductors. Your local lightning-protection experts or building inspectors can tell you what sizes you should use for each application.

Q: Okay, I know what to look for. Now what do I do with all this stuff?

A: Start with your tower and antennas. Because a tower is usually the highest metal object on the property, it becomes the most likely target for a strike. Proper tower grounding is essential to lightning protection. The goal is to establish multiple paths to Earth ground at the tower so that the strike energy is divided and dissipated.

To establish multiple current paths on a tower, connect each of the tower legs and all of the metal guy wires to separately driven ground rods. The ground rods must not be closer than 6 feet from each other. Bond the tower ground rods together with a #6 AWG or larger copper bonding conductor (forming a "ring" around the tower base). In addition, connect a continuous bonding conductor between the tower "ring" ground and the bulkhead panel at the entrance to your home. All connections should be made using connectors

and fittings approved for grounding applications. Do not use solder for these connections. Solder connections will be destroyed by the heat of a lightning strike.

Unless the tower is being used as a shunt-fed antenna, grounded metal guys should always be used. If the tower is a crank-up or telescoping type, be sure to add a strap jumper at the junction of each section to keep the resistance low. Because galvanized steel (which has a zinc coating) reacts with copper when combined with moisture, stainless steel hardware should be used between the galvanized metal and the copper grounding materials.

All grounding media at the home must be bonded together. This includes lightning-protection conductors, your electrical service, telephone, antenna system grounds and underground metal piping. Any ground rods used for lightning protection or entrance-panel grounding must be separate and spaced at least 6 feet from the electrical service or other utility ground.

Q: If the strike energy takes several paths to ground, doesn't it follow the feed line as well?

A: Yes, it sure does! To prevent the strike energy from entering the shack via your feed line, you must ground the feed line outside your home. The portion of the coax that runs down the tower should also be grounded to the tower to keep the tower and line at the same potential. This helps prevent the side-flash phenomenon mentioned in Part 1 of this series. Ground the coax at the top of the tower and at the lowest point on the tower (just before it's routed to the shack). Several companies offer grounding blocks that make this job easy. PolyPhaser offers a coax-grounding kit that uses straps instead of blocks. The straps can easily accommodate many different coax sizes.

The feed line should also be grounded just before it enters the shack. You can do this with an in-line arrestor mounted on an entrance panel. We'll discuss this in amoment.

Q: Is there anything else I should know about feed lines?

A: Most lightning-protection schemes have one goal in mind: Controlling the flow of the energy in a strike. The energy is most dangerous when it goes in unintended or unexpected directions. To avoid a surprise, you must eliminate any possible paths for surges to enter the building. This involves routing the feed lines, rotator control cables, and so on at least 6 feet away from other nearby grounded metal objects.

Q: What about the lightning arrestors that I see advertised?

A: They are another important part of your protection plan. Feed-line lightning arrestors are available for both coax cable and balanced line. Most of the balanced line arrestors use a simple spark gap arrangement, but a balanced-line impulse suppressor is available from ICE (see their address at the end of this column).

Arrestors for coaxial cable also come in several types, each of which functions somewhat differently. DC blocking-type arrestors have a fixed frequency range and must be selected for a specific application. Their main advantage is that they present a high-impedance path to the frequencies found in lightning (less than 1 MHz) while offering a low impedance to signals created by your radio.

Arrestors that have dc continuity (the gas tube and spark gap types) are broad-band and can be used over a wider frequency range than the dc-blocking types. Also, in installations where the coax is also used to supply voltages to a remote device (such as a mast-mounted preamp or remote coax switch), the dc continuity-type arrestor must be used.

Whether you use balanced line or coax arrestors, they should be mounted at the entry point to your shack - on the outside of the building - using a secure grounding connection. The easiest way to do this is to install a large metal (preferably copper) enclosure as a bulkhead and grounding block. This bulkhead serves as your last line of defense by keeping the lightning energy from entering your home, so it's critical that it be installed properly. You can homebrew a bulkhead panel from 1/8-inch copper sheet, bent into a box shape. Position the bulkhead on the building exterior, 4 to 6 inches (minimum) away from nearby combustible materials. Install a separate ground rod for this panel and connect it to the bulkhead with a short, direct connection. Also, bond this ground rod to the rest of the ground system. Mount all protective devices, switches and relay disconnects on the outside wall of the bulkhead.

Q: What about my rotator control lines?

A: You'll find multi-wire surge suppress-ers for these and other wires leading to your antenna system. They are available from a number of manufacturers, including ICE and PolyPhaser. As with the feed-line arrestors, these should be mounted on the grounded entrance panel.

Q: Can I do anything else to keep a strike from reaching my equipment?

A: The only foolproof way to protect your station equipment is to completely disconnect each item from the antenna system and the wall outlets when you're not operating. Even when you're on the air, however, you could encounter the

rare "bolt from the blue."

Let's admit it; we sometimes forget to disconnect our station before we go off to our other activities. Don't let the lack of a thunderstorm forecast lull you into a sense of false security. Although lightning usually occurs during summer thunderstorms, it has also been known to strike during winter storms - and even when there are no storms at all. The strike that comes before the first clap of thunder may be the one that hits your station.

Q: Is there an easy way to disconnect my setup?

A: A quick, convenient way to disconnect your feed lines is through a feed-line switch. If you're using a coaxial feed line, you can use a manual, multiposition coax switch, a remote coax switch or an in-line coaxial relay.

Although you could also simply disconnect your coax by hand, it's awkward and the connectors will become worn after repeated connecting and disconnecting. Some coax switches also contain lightning arrestors.

For open wire or ladder line, you could install a knife switch or electrically operated remote 2-pole relay. Whichever method you choose, be sure to mount the switch on the outside of your entrance panel.

Q: Is there anything else I should do to protect my equipment?

A: One area often neglected is power line protection. Inexpensive multioutlet strips usually have little or no protection against surges or transients. Sensitive electronic equipment (modern digital radios, TNCs, computers, etc) sometimes need more protection than the factory provides.

Power line protectors use several different protection schemes, each of which solves a different power-line problem. Inrush current limiters keep the input current to the equipment's power supply from exceeding a fixed level. Transient suppressors (usually semiconductor-type devices) absorb voltage spikes that could damage sensitive digital ICs. Surge suppressors limit the input voltage on the line (usually by a clamping or "crowbar" method) to prevent damage.

To protect your equipment against transients caused by lightning-induced voltage surges on the ac line, unplug the power strip at the wall socket. Don't depend on the built-in switch or wall-outlet switch. A nearby strike can induce voltages that will easily jump the gap and overload the protective circuits.

Q: Now what about that list of manufacturers?

A: As promised, here they are:

Alpha Delta Communications

PO Box 620

Manchester, KY 40962

tel 606-598-2029

Note: Coax lightning arrestors, coax switches with surge protectors

Ameritron

921 Louisville Road

Starkville, MS 39759

tel 601-323-8211

Note: Remote coax switches, inrush ac current protector

Certified Quality (The Wireman)

261 Pittman Rd

Landrum, SC 29356

tel 800-727-9473 (orders)

803-895-4195 (Tech line)

Note: The Wireman stocks copper wire up to #4 AWG, 2-inch flat copper strap, 8-foot copper-clad ground rod and 1 x 1/4 inch bus bar.

Cushcraft Corporation

48 Perimeter Rd

Manchester, NH 03108

tel 603-627-7887

Note: Coax lightning arrestors

Industrial Communication Engineers, Ltd.

PO Box 18495

Indianapolis, IN 46218-0495

tel 317-545-5412

fax 317-545-9645

Note: Coax lightning arrestors

Lightning and Noise Protectors

PO Box 380054

Birmingham, AL 35238-0054

tel 800-776-8357

MFJ Enterprises

Box 494

Mississippi State, MS 39672

Note: Model 1704 coax switch with lightning arrestor

PolyPhaser Corporation

PO Box 9000

Minden, NV 89423-9000

tel 702-782-2511

Note: Many lightning protection products for feed lines, towers, equipment, etc

Radioware Corporation

87 Belmont Street

North Andover, MA 01845

tel 800-950-9273

Note: Amateur products distributor; Radioware stocks grounding blocks, other grounding products and many ICE products

Rohn

PO Box 2000

Peoria, IL 61656

tel: 309-697-5612

Note: Copper strap and other tower grounding products

Zero Surge Inc

944 State Route 12

Frenchtown, NJ 08825

tel 908-996-7700

Note: Power line surge protector

Thanks to ARRL Technical Advisor John Bittinger, KI7GW, for his assistance during the preparation of this column.

We welcome your suggestions for topics to be discussed in Lab Notes, but we are unable to answer individual questions. Please send your comments or suggestions to: Lab Notes, ARRL, 225 Main St, Newington, CT 06111.

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The members and HQ staff would like to thank the following people for their contributions to this information file:

KI7GW

Send any additional information or changes to mtracy@arrl.org.

73 from ARRL HQ.

Date: Thu, 04 Dec 1997 11:50:33 -0600

From: "George T. Baker" <w5yr@swbell.net>

To: Rattray@siast.sk.ca
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [31910] Re: N7ML?
Message-ID: <3486ED69.15B3@swbell.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Rattray, Bruce wrote:

>
> Anyone know N7ML?...I was practising copying code the other night while
> Fox HUNting and this "hugegly awesome" signal (isn't that what the kids
> say these days?) came on around 7.007 MHz so I copied some of it...this
> chap is from Montana, I believe...he was working DX stations...so I
> wondered if I could hear the DX stations as well...yes, some of them a
> little bit...but then came the surprise for me...if I copied correctly,
> N7ML is runnning yagis, 3 over 3 over 3 on a 195 foot
> tower?!....WOW!....where's my Christmas list?...scramlbe,
> flip,flip,flip, page 10...ok, item 200...new location outside the city,
> at least 5 acres of land, 200 foot trees72 - Bruce(VE5RC)

That is Mike Lamb, former head of AEA before it was sold. Don't tangle
with him in a pileup - you are wasting your coulombs.

--
73, George
W5YR
AutoPOWER Systems
Fairview, TX

Date: Thu, 4 Dec 1997 21:28:25 -0700
From: gsurrency@juno.com (Gary Surrency)
To: terresfm@ncia.net
Cc: qrp-1@Lehigh.EDU
Subject: [31911] Re: Best way to de-flux circuit boards?
Message-ID: <19971204.214140.3438.2.gsurrency@juno.com>

Jerry AA10F wrote:

>Will acetone dissolve polystyrene caps?

Acetone will make short work of polystyrene caps, so don't use it near
them.

Denatured alcohol is OK to use near poly caps, but try to keep any of

these solvents on the foil side of the PCB and don't drench the surface. Instead, use a small amount and scrub with a brush as you add a little bit of solvent to wash away the dissolved crud while holding the PCB at angle that permits draining. Plastic polyethylene squeeze bottles with a right angle tube spout is the way to go. Evaporation is kept to a minimum and the bottle is always ready for use, plus the small orifice helps control the flow.

I have two poly bottles for PCB work. One is to keep the soldering sponge wet with water, the other holds the alcohol for cleaning the board.

72,

AB7MY

Gary Surrency

Chandler, AZ (Near Phoenix), QRP-L #571, AZ ScQRPions, ARRL VE

Date: Thu, 04 Dec 1997 12:05:00 -0600
From: "George T. Baker" <w5yr@swbell.net>
To: we6w@qsl.net
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [31912] Re: K8FF Paddle NOTE!
Message-ID: <3486F0CB.6486@swbell.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Ed Loranger wrote:

>
> Folks, I have been having intermittent problems keying lately,
> but Jim's log entry made me research what was going on.:
>
> > 25 WE6EM 549 CA ED 1068
>
> That's right. The K8FF Paddles sent WE6EM, although I sent
> WE6W. I thought I had corrected my call, or Jim knew who I
> was, but alas there is that call my paddles sent....
>
> NOW: Note I said "The paddles sent the call". Well, it is true.
>
> After checking out my keyer and associated cables etc. Polishing up
> the stainless contacts with 1000 grit sanding stone, I still had
> a problem with the "Dah" paddle.
>
> Background: I love these Norcal/K8FF Paddles. When I opened up my kit

> and started building, I noticed that one of the Bearings was smaller
> than the other. They should be identical. I installed the smaller
> bearing
> the Dah shaft. Because of the smaller bearing the paddle has vertical
> play, even with the micrometer measured .001 tolerance between the
> bearing
> height and the shaft.
>
> I mentioned in an earlier post, my concern of the ground path which
> is: Stainless Contact, thru arm, Bearing, brass washer, allen screw,
> BASE.
>
> Sure enough, the extra space within the paddle arm due to a smaller
> bearing has resulted in intermittent contact ground.
>
> Last night I blew A very nice Chat when the problem went from very
> intermittent
> to often. I bet that guy thinks I'm a clown...
>
> I have patched a small wire from the center block to the paddle arm
> screw/nut to guarantee a grounded arm.
>
> I have not had any problems with this since. After adding the wire I
> ran
> through the alphabet about 30 times plus numbers. Then I sent
> CF CF CF and CL CL. These were the best I found for testing any
> transitions.
>
> I am hoping that replacing the bearings with ball bearing races will
> totally eliminate this problem. Otherwise I am devising a more pleasing
> to the eye wiring solution.

Had to do the same thing to my Vibroplex VibraKeyer several years ago. I
used VERY flexible braid, one from each contact on the paddle to the
base. Looks a little "off" but I decided performance outranked looks!

--

73, George
W5YR
AutoPOWER Systems
Fairview, TX

Date: Thu, 4 Dec 97 10:40:09 -0700
From: Russ Carpenter <russ@natworld.com>
To: "QRP-L List" <qrp-l@Lehigh.EDU>

Subject: [31913] Soapbox for the December Spartan Sprint (Long)

Message-ID: <199712041837.KAA27154@guppy.pond.net>

Mime-Version: 1.0

Content-Type: text/plain; charset="US-ASCII"

>From Gary, KJ5VW

Got a late start, used by "tubby" station, worked 3 stations in a row and then fell into a 30 minute rag chew with a QRO station camping up in the Arizona mountains somewhere. Heard some really strong signals coming in from the Southwest. Picked up a Utah and Nevada station without even trying. If you want some rare states, just give the Spartan Spring a try. As always, twas great fun!!!!

>From Dave, W9SUL

As usual had a great time... nice to hear familiar calls but have the opportunity of working so many new ones also.

See you all in January..

>From Steve, N0TU

One observation is I've got to cut down on the weight of the antenna tuner or maybe bag it and use a dipole or 50 ohm antenna!

Or about 2.2 QSOs per pound I think?
But more like a TON of FUN! ;-)

>From Jon, KD3FG

40m was too noisy but there was a great crowd on 80m! Used an Alinco DX-70 turned down to 5w with the Astron and commercial power. Had a great time!

>From Evan, WA4AAK

A very slow start on 40m finally turned into a great evening as noise levels in Alabama dropped. Russ, AA7QU, was my first contact - I think he has some sort of super-sensitive receiver (or ears). Then I got to

talk to Ed, WE6W, whom I had just met via email the day before when I asked him for help with my Pixie transceiver project. QRP is a small world, but filled with lots of nice people! Then I got to make six more new friends before the time was up. Thanks & 72 to everyone who participated.

>From Ed, WE6W

Wow! Big East Coast Connection at my qth. I measured 3 Watts out using Makita 12Volt battery to my OHR-100. Headphones. Norcal Paddles. Total wt.=2.6 lbs. 40 Meters only.

N0TU, K4Wz,N4UY, N4ROA, WA4AAK, W3YK, K0SU, N6GA, N0BS.

N0BS gets the 'Due Dilligence' award! RST=119 and he gave me 219!!! Had to work him twice to get the qso point.

What propagation! Here in CA at 3 Watts I get:
CO, GA, VA, AL, MN, NM. Cool. Love these sprints!

>From Pete, W6ZH

With only single band operation this time, used a NorCal40A "lite" set at 2 watts out. "Power Supply" was 9 AA cells (used for the third time on SP's) that measured at just about 12 volts at the end of this SP. Band conditions were variable - QSB ruled, along with a noise level that came and went. Considerable QRM, much of it from AMTOR/PACTOR stations just below 7.040. Didn't hear some of the East Coast stalwarts this time, but K4WZ had an outstanding signal and N4ROA came booming in as usual. When you ('7QU) switched your antenna to favor this direction you went from a 449 to a 579 - 18 dB gain - some antenna!!! All in all, a pleasant 2 hour stint.

>From Earl, VE5WF

Hi Russ...Nice evening here for Spartan Sprint, although I was indoors. I was a little surprised that 20M wasn't part of the sprint, but now that I have a 40M rig (GM-40) I didn't mind. Managed a samller battery this time round. Anyway I had a nice time this evening, got a little practice with calling CQ, and a few more contacts.

>From Randy, AB7TK

A good night for distances. I worked CA to GA and VA from ID with 2 watts. The GA and probably the VA were 1,000 miles per watt. Station was SST, 10-AA NiCads, G4ZPY paddles, and an earpiece. Around 0200 I thought I'd be better off on 80, but didn't move.

>From Aron, N10DL

My first time for this contest. Enjoyed it very much. Band was quite noisy, but I was able to pull a few out. Am looking forward to the next one. and hope to get many more contacts.

Was amazed at WA4AAK working 1 watt. He was quite strong in NH with a 459. he sounded as strong as some of the others at higher power.

>From ken, VE3LEA

After a few QSOs on 40m, I switched to 80m and that seemed to be where the action was. Thanks to KU7Y for his patience, who hung in there until we had completed the exchange. Another great Sprint!

>From Joel, WA1QVM

40 meters was LONG but with very high QRN. Best signal on 40: KU7Y.

80 meters was much better than 40. I even had a short run of stations. Best signal on 80: N2TNN.

Rig: QRP+ at 4 watts, keyer, G5RV antenna. Weight not known.

>From Dan, N4ROA

I used my recently completed Sierra for the first time. Managed to lower my weight some but had to use a Bencher paddle this time. Have to work on that.

>From Mark, N2VPK

This was my second try at using TR-LOG. I hope that the folks I worked do not think I have lost my marbles! It took a bit to get the exchanges set up and I still am not up to speed.

As for the SP, I could not find my headphones right away and it cost me a few contacts. I could hear stations answering my CQ's, but I could not get the callsigns.

Boy, if I built a rig for 80M I could do a lot better in Q's/Pound. I have an SW40 but there were not many workable guys on 40M.

BTW, does the weight of my computer count?

>From Tom, N0BS

I got a late start and at my weight was definitely there just to provide QSOs for others! Most satisfying contact was the toughest QSO I ever made. WE6W and I tried a couple times during the contest, and finally managed it with RSTs of 219 and 119 exchanged (I got the 119). Afterwards I looked up the official rendition of Q1 - it is "unreadable," so I will assume I really should have received a 219 also !!!!! Thanks for hanging in there. Lots of fun. New GAP vertical seemed to work well, in spite of very noisy band here. Some sigs were very strong, others barely perceptible.

>From Larry, WD3P

Ran the Sierra with the Whiterook keyer and a set of AA batteries. Started out at 1.2 Watts and ended up at 1 Watt as the batteries died. 80 Meters was good - didn't hear anyone one on 40M for the little bit of time I tried it.

>From Mike, W3TS

Ran the Sierra with the Whiterook keyer and a set of AA batteries. Started out at 1.2 Watts and ended up at 1 Watt as the batteries died. 80 Meters was good - didn't hear anyone one on 40M for the little bit of time I tried it.

>From Monte, KU7Y

No stations close in were heard. 1800 local and the band was already long. But the east coast did a bang up job. 3 contacts with MI and MN. The loading setup for the tower/80m was kicked loose by some critters. Gotta get that into a box! Worked 15 states and 2 Canadian Prov. (Worked 2 from ON....never could find ON in SS!!) Did I figure the weight right? Rig, computer, feed lines, rotor and cable, tower and antenna? Or do I need to also add the 7 yds of cement to that figure? :-) Keep up the good work, Ron, KU7Y

>From John, K3WWP

A fun little contest. I'll probably enter each month. This time I did an 80 meter only entry. My 19 QSOs were spread over 10 states and Ontario. I worked everybody I heard. Most distant QSO was either KQ0I in IA or N0BS in MN. I'm using IE 4.0 to submit this. Hope it gets there.

>From Rick, K0SU

Used the Sierra tonight. Good ears out there. Still need to get the weight down. Lots of fun.

>From Stephen, K7PX

MY FIRST CW CONTEST AND THANK THE STARS FOR W6ZH.

>From Dean, N2TNN

Great sprint here in NJ. Worked Ron in NV for a new state and then it was off to the races on 80 meters. Look forward to the event ever month.

>From Eric, WD8RIF

This was the first Spartan Sprint I was able

to participate in since April. I had a very good time. Signals on 80m were fairly strong and QRN wasn't a problem.

I like these events, and hope that with the colder weather and earlier darkness I'll be able to participate in more of them.

Date: Thu, 4 Dec 97 10:40:12 -0700
From: Russ Carpenter <russ@natworld.com>
To: "QRP-L List" <qrp-l@Lehigh.EDU>
Subject: [31914] Results of the DECEMBER SPARTAN SPRINT
Message-ID: <199712041837.KAA27159@guppy.pond.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="US-ASCII"

The December Spartan Sprint was a winner. We had a record number of logs submitted and plenty of activity. For most people, the key to life was 80 meters on the East Coast. On the other hand, Ron, KU7Y, bucked the trend with an outstanding score on 40.

We're introducing a few changes with this Sprint. We're giving more formal names to our two divisions. The scores sorted by points per pound will hereafter be known as the "Skinny Division." The scores sorted by points will continue to be known as the "Tubby Division."

To keep things simple, if you report a station weight of more than 30 pounds, we are stipulating a station weight of 30. If you don't report a station weight at all, we are stipulating a station weight of 30.

In the spirit of keeping ARS a "paperless" organization, we will no longer send paper certificates to the winners. However, we will celebrate your accomplishments in three paperless ways:

- By posting the results to the QRP-L;
- Through ARS' automated emailing system to members, and
- By posting on the ARS web site.

Almost all of you are using ARS' automated reporting system. Thank you!!

It makes life much easier for you and us. For those of you who are not using the system, give it a try. You'll love it.

To make the tables line up correctly, set your email reader to a monospaced font.

THE SKINNY DIVISION

Call	Name	80 M	40 M	Total	Weight	Points/ Pound
Mike	W3TS	22	.0	22	.8	27.50
Pete	W6ZH	0	17	17	1.34	12.69
Larry	WD3P	17	0	17	2.5	6.80
Randy	AB7TK	0	8	8	1.3	6.15
Russ	AA7QU	0	15	15	2.7	5.56
Evan	WA4AAK	0	8	8	1.5	5.33
Bob	K7VYY	0	11	11	3	3.67
Ed	WE6W	0	9	9	2.6	3.46
Joel	WA1QVM	13	3	16	5	3.20
Dan	N4ROA	0	15	15	6.1	2.46
Steve	N0TU	0	7	7	3.2	2.19
Eric	WD8RIF	18	0	18	9	2.00
Tom	N0BS	1	17	18	10.5	1.71
Rick	K0SU	0	5	5	3.7	1.35
Dean	N2TNN	13	1	14	11	1.27
Earl	VE5WF	0	8	8	9	0.89
Monte	KU7Y	0	26	26	30	0.87
Gary	KJ5VW	4	0	4	5.0	0.80
Aron	N10DL	0	3	3	3.9	0.77
Stephen	K7PX	0	1	1	1.5	0.67
Walt	K8CV	12	8	20	30	0.67
John	K3WWP	19	0	19	30	0.63
Mark	N2VPK	6	2	8	13	0.62
Jon	KD3FG	16	0	16	30	0.53
Ken	VE3LEA	10	4	14	30	0.47
Dave	W9SUL	1	11	12	30	0.40
Rick	WZ2T	0	4	4	30	0.13

THE TUBBY DIVISION

Call	Name	80 M	40 M	Total
Monte	KU7Y	0	26	26
Mike	W3TS	22	.0	22
Walt	K8CV	12	8	20
John	K3WWP	19	0	19
Tom	N0BS	1	17	18

Eric	WD8RIF	18	0	18
Pete	W6ZH	0	17	17
Larry	WD3P	17	0	17
Jon	KD3FG	16	0	16
Joel	WA1QVM	13	3	16
Dan	N4ROA	0	15	15
Russ	AA7QU	0	15	15
Ken	VE3LEA	10	4	14
Dean	N2TNN	13	1	14
Dave	W9SUL	1	11	12
Bob	K7VYY	0	11	11
Ed	WE6W	0	9	9
Evan	WA4AAK	0	8	8
Earl	VE5WF	0	8	8
Randy	AB7TK	0	8	8
Mark	N2VPK	6	2	8
Steve	N0TU	0	7	7
Rick	K0SU	0	5	5
Gary	KJ5VW	4	0	4
Rick	WZ2T	0	4	4
Aron	N10DL	0	3	3
Stephen	K7PX	0	1	1

Thank you for your participation and support of ARS! If you're not a member of ARS, we'd be very happy to include you in this community of great men and women who combine amateur radio with their love of the outdoors. Membership is free, and you get all kinds of interesting information from our automated email system (including the first crack at becoming a Bumblebee in the Flight of the Bumblebees). Just contact Richard Fisher, KI6SN, at ki6sn@aol.com.

Russ Carpenter, AA7QU
Contest Manager

Date: Thu, 4 Dec 1997 11:41:32 -0600
 From: "Marshall Emm" <mgemm@mtechnologies.com>
 To: Terres Family <terresfm@ncia.net>
 Cc: qrp-1@Lehigh.EDU
 Subject: [31915] Re: Tenna tape
 Message-ID: <199712041841.LAA24886@bobcat.sni.net>
 MIME-Version: 1.0
 Content-type: text/plain; charset=US-ASCII
 Content-transfer-encoding: 7BIT

Hi, Jerry, gang--

>>Anybody ever try Tenna Tape for an antenna? I'm not even
sure if it's still sold but was thinking about getting
<<

If you mean TapeTenna from Ham Co (fellow QRPer NF0Z) it works well
and I have used it for several stealthy antenna designs, also 2M ant
on a plastic van. Jane (AA0ZR) used it to make an SLV variant, and
it's written up in the last Low Down.

As far as I know it's still available-- saw the ad fairly recently in
QST.

73
Marshall Emm
N1FN/VK5FN
n1fn@mtechnologies.com
Milestone Technologies
Software, kits, tools...
<http://www.mtechnologies.com/mthome>
(303)752-3382
--

Date: Thu, 04 Dec 1997 13:53:56 -0500
From: Michael Maiorana <mikemo@ibm.net>
To: elim@IME.NET, mbroga@cu-online.com
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [31916] Re: MFJ mods posting
Message-ID: <3486FC44.35A6@ibm.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Here ya go.

I'm attaching some comments on the MFJ rigs I prepared a couple of years
ago. I'm reposting it due to the recent inquiries about the MFJ rigs.
72, Paul NA5N

MFJ 90xx SERIES 5W QRP TRANSCEIVERS

OVERALL OPINION.

The MFJ rig works as advertised with room to spare. This would hold

true
for any QRP rig using the same general circuit. The NE602/MC1350/NE602 scheme is an excellent 3-chip receiver with a sensitivity that rivals big rigs (~.2uV/-120dBm region). It favors well to many of the recent kits on the market, with the advantage of purchasing a ready-to-go rig, and one feature often missed ... they're built like a tank in a stout enclosure that can well tolerate some ruff, banging around use.

The XMTR portion is about the same ... works great for its simplicity with good harmonic supression on the output. It is hard to misadjust the transmitter to exceed FCC specs for the -30dB down harmonic supression, EXCEPT FOR OVERDRIVING the transmitter which will guarantee out-of-spec emissions. The 2N5109 Q8 driver and MRF-476 Q9 PA final operate pretty close to their limits. This should be no problem for CW, but would likely be fatal for RTTY/packet at full power. This would be true for any rig running 4-5 watts from a single MRF-476.

RECEIVER SECTION

1. L3 VFO CAL is very touchy! 1/2 turn=50 kHz on 40M, ~100 kHz on 30M.
2. Tweaking the RF-IF cans by sound off a weak signal (to keep the AGC from kicking in) is a very good way to optimize the IF's for best gain and noise figure. Recommend using an Amtor/RTTY sig for a more constant signal level.
3. T1, the first IF can after the U1 NE602, has the most profound effect on images. If you're having images, birdies or excessive noise floor, adjust T1 for peak, then back off a bit to reduce noise. This will scarcely effect IF gain, but images and noise drop 10dB in <1/4 turn.
4. BFO adjustment C67 is also very touchy (although only effects detected CW tone, not the VFO frequency). Use insulated screw driver.
5. In the lab tests, note the AGC voltage vs. the gain reduction produced.
In my opinion, the gain reduction is too high for weak signal reception (typical QRP work!). Try setting AGC V. (TP2) to 3.6 or even less with no signal for enhanced weak signal gain. If you're using the CW filter, this will also give a better sounding sidetone. Play with it for

your

taste. There is nothing sacred about the AGC voltage. It is strictly

for operator convenience. A lower setting will make it a bit prone to

strong signal overloading, however. One quick poor-man's method to properly set the AGC voltage is to adjust the AGC gain pot for a pleasing sounding sidetone. When the sidetone is loud and raspy, you are driving the receiver into gain compression; when it sounds pure, the AGC gain reduction is properly set for strong signals. This does not effect the overall gain to weak signals.

6. One of the mods I've added to several MFJ's is a front panel mini-toggle switch for AGC FAST-SLOW. The AGC FET has a 1M from the gate to ground; the switch in AGC FAST places a 5.1K across this 1M ohm resistor to greatly speed up the discharge time of the AGC cap. This works great in high static situations, where static impulses seems to nearly mute the MFJ due to the long time constant. The AGC SLOW position

in the MFJ "as-it-comes" (no mod to the time constant).

TRANSMITTER SECTION

1. VFO DRIVE R41. MFJ manual says don't exceed drive past the output power

plateu or else spurious emissions may occur. An UNDERSTATEMENT. It gets

so ugly on a spectrum analyzer, I haven't the words to describe it. You

CAN judge by the sound of the sidetone ... when it starts to hum a bit,

your 2nd and 3rd harmonics are coming up. When sidetone gets raspy, you

are generating hash from DC to light and the MRF-476 is in VHF oscillation.

The point where the sidetone just leaves that pure sound is maximum power

with the cleanest output and the most reduced harmonics. In other words,

set the drive control for max output just as the MFJ manual describes.

2. Peaking the TX1 and TX2 cans (L6 and L7) is very important. These are

the filters coming out of the TX VFO Mixer NE602, before the Q7 buffer.

Adjust for peak output on RF meter. While peak on L7 may seem a bit sluggish, exact peak has lowest harmonic power and provides proper signal

level and bias to drive Q8. Don't hesitate to peak these TX cans. Lowest harmonic content occurs when these are peaked.

3. When peaking TX1 and TX2, your output power can also fall off as you move away from the frequency where you peaked them. If you desire a more constant output power vs. frequency, stagger tune TX1 for peak power towards the bottom 1/3rd of the band and TX2 towards the upper 1/3rd of the band. Output power may be reduced 0.5W this way, but the overall output power will be flatter across the tuning range.
 4. TX OFFSET C66 is very touchy. This is what determines your TRANSMIT frequency by mixing the VFO from the RX with the TX offset freq.
- Obeey the proper sequence in the MFJ manual for the order in adjusting the VFO CAL, TX OFFSET and BFO for proper TX-RX offsets. HINT: If you can get the TX offset for exactly 700 Hz shift, then adjusting the BFO for the 700 Hz sidetone is easily done just by sound. Then, when you answer a CQ, tune in the station for the same tone as your XMIT offset, and you will be right on his frequency.

CLOSING THOUGHTS/TECH NOTES

1. Some of the earlier versions of the MFJ's were prone to frequency drift, up to 1KHz in the space of a QSO. This was dramatically improved by MFJ by incorporating silver mica caps in the VFO circuit. If you have an older rig with the dipped mica caps in the VFO, call MFJ ... they will send you the more temperature stable caps for free, or for shipping. This has not been a big reported problem in the past couple of years since MFJ made this change.
2. I destroyed the Q7 2N5486 FET transmitter buffer (for reasons I won't elaborate!). The old junk-box standard, MPF-102 FET, worked just fine and would probably be a suitable replacement for any of the 2N5486's.
3. The Omniron relay used for the T-R switching is rated for 100,000 actuations. This means if you set minimum delay for almost QSK operation, you could burn out that relay by exceeding its actuation limit. It is available from Digi-Key for about \$5.
4. If you take your MFJ apart ... make sure when you bolt down the MRF-476 PA, you get it good and tight for maximum heat transfer. It does get hot. Also, don't loose the mica insulator (no part of Q9 should be touching ground). Q8 driver 2N5109 also can get quite warm with active

use. My 9040 had a heat sink on Q8 and ran cool, but my 9030 did not and ran hot to the touch. Added a heat sink for precaution.

Hope the information and comments help. Of course, your mileage may differ. These are fun rigs, work well, and easy to modify, play with and learn some electronics. Always interested in your comments or measurements.

72, Paul Harden, NA5N
pharden@nrao.edu or NA5N@rt66.com

--
If it's tourist season, why can't we shoot them?

Date: Thu, 4 Dec 1997 15:01:41 -0500 (EST)
From: Chris Cartwright <ccart@dns.vidtel.com>
To: QRP Reflector <qrp-l@Lehigh.EDU>
Subject: [31917] Re: Best way to de-flux circuit boards?
Message-ID: <Pine.LNX.3.93.971204145842.646I-100000@dns.vidtel.com>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

On Thu, 4 Dec 1997, Gary Surrency wrote:

> I have two poly bottles for PCB work. One is to keep the soldering sponge
> wet with water, the other holds the alcohol for cleaning the board.

Hopefully clearly labeled and on opposite sides of the bench. Getting them backwards could be... umm... a "hot" time :) 72

-- Chris Cartwright, Technical Engineer | ccart@vidtel.com --
-- N3XRV ARRL-VE QRP WAS 27/10(w/c) | http://dns.vidtel.com/~ccart --
-- QRP-L #655 NORCAL #1891 QRP-ARCI #???? NJ-QRP #105 LIQRP #???? --

Date: Thu, 4 Dec 1997 10:57:00 -0600
From: Bob Tellefsen-CNSE97 <Bob_Tellefsen-CNSE97@email.mot.com>
To: wbw95k@timon.acu.edu, qrp-l@Lehigh.EDU

Subject: [31918] Modem parts

Message-ID: <M2337027.014.oiq9i.1.971204191330Z.CC-MAIL*/OU=LMPCC4/OU=ILBB/
PRMD=MOT/ADMD=MOT/C=US/@MHS>

William:

There are several things that can be salvaged from a modem.

For example, I use an old modem housing for my QRP Autotuner. It is a nice fit.

On at least one modem I've scrapped, there were a number of 2N3904 transistors which we use often. Also the speaker sometimes.

I kept the front panel on the Autotuner modem housing, so I could use the rocker power switch and power LED.

So, don't just pitch the housing or the contents. There are useful pieces there.

72, Bob N6WG

Date: Thu, 4 Dec 1997 10:13:00 -0600

From: Bob Tellefsen-CNSE97 <Bob_Tellefsen-CNSE97@email.mot.com>

To: sct@po.cwru.edu

Cc: qrp-l@Lehigh.EDU

Subject: [31919] Re: Ant tuner

Message-ID: <M2337025.012.oiq9f.1.971204191329Z.CC-MAIL*/OU=LMPCC4/OU=ILBB/
PRMD=MOT/ADMD=MOT/C=US/@MHS>

Stephen:

Since you will building the antenna tuner from scratch, and you have a rotary coil, my vote would be for a pi network. Use a metal chassis, even an aluminum cake pan will do. then connect it to a ground. If no good earth or water pipe ground is available, run a couple quarter wave lengths of thin wire around the room baseboards or under the carpet.

Since you live in an apartment complex, the inherent low-pass filter nature of the pi network would be to your advantage in helping to reduce potential TVI problems.

Another recommendation is to try for a balanced antenna like a dipole, even if it isn't resonant. Very thin wire will allow you to hang something outside that won't be seen. If you can't hang a dipole,

then go for the largest loop you can construct given the space available. Try to avoid long wire antennas (of any length) as they require a reference to ground. This could increase potential TVI problems. Balanced antennas don't need the ground reference and are less prone to TVI problems.

Lots of fellows are in your boat, and are on the air, so we know it can be done.

Good luck and 73,

Bob N6WG

Date: Thu, 04 Dec 1997 19:15:37 +0000
From: Ed Loranger <we6w@qsl.net>
To: Bob_Tellefsen-CNSE97@email.mot.com
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [31920] Re: Modem parts
Message-ID: <34870159.34F8@qsl.net>
Mime-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

I used an old acoustical modem speaker in my
RF Sensing Sidetone device I made.

Small world.

-Ed

--

72/73 de we6w qrp es cw ONLY (From non-ham to extra in one day!)
HW-8,0HR-100, Pixie2, Johnson Viking II, Drake TR-3
QRP-L#1068,ARCI#9397,Norcal#2227,ARS#275,AR#112 grid CM88ok
mailto:we6w@qsl.net <http://www.qsl.net/we6w>

Date: Thu, 04 Dec 1997 12:46:50 -0700
From: Doug <doug@sunrise.alpinet.net>
To: ARDUJENSKI@aol.com
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [31921] Re: LADDER-LINE DISCONNECT?
Message-ID: <348708A9.2CDDE66C@alpinet.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii

Content-Transfer-Encoding: 7bit

Yes...use some form of DPDT knife switch, preferably ceramic based.
Switch the antenna straight to ground when not in use during the lightning season.

73

Doug, K7YD

ARDUJENSKI@aol.com wrote:

> There is a lot of discussion about disconnecting feed lines when lightening
> is present. What about ladder lines that feed directly into the shack? There
> doesn't appear to be much literature on the subject.
>
> Just disconnecting in the shack it doesnt seem to resolve the problem because
> lightening could just follow it into the house anyways. Is it necessary
> (prudent)to put a disconnect switch outside the house (knife switch) that
> will ground out the antenna (in addition to an internal disconnect)?
>
> Alan KB7MBI

Date: Thu, 4 Dec 1997 13:11:11 -0700
From: "Steve Hurst" <shurst@magiclink.com>
To: <qrp-1@Lehigh.EDU>
Subject: [31922] ground question response
Message-ID: <199712042016.PAA161802@nss4.cc.Lehigh.EDU>
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit

Gang,

Thanks to all who responded to my grounding question, and those who are going to respond ! :-) It has certainly given me lots to think about in the way I will ground my shack ! I live in southern Idaho which is basically flat farm/desert land. My acreage is also flat , anything I put up in the air higher than our house and telephone poles, will be the highest structure for many miles !! And we get the "mother of all T-storms" here !! It drives Spike (our Chihuahua qrp dog !) bonkers. You know what the motels use for the motor in their vibrating beds ? Its really just a

Chihuahua dog under there that is forced to listen to Thunderstorm recordings !! When you drop in the quarter, the recordings start playing !! He really is a tough guy though, takes on dogs ten times his size ! Anyway , (how the heck did I get on that ?) I want to be as "safe" as possible. Tnx again all, have a nice holiday season !!

73,
Steve Hurst & Spike the "killer" Chee Wa Wa
KA7NOC (southern Idaho)
<http://www.magiclink.com/web/shurst>
shurst@magiclink.com

Date: Thu, 4 Dec 1997 16:26:24 -0500 (EST)
From: Chris Cartwright <ccart@dns.vidtel.com>
To: QRP Reflector <qrp-l@Lehigh.EDU>
Subject: [31923] FOX: 4 hours of foxin' tonite
Message-ID: <Pine.LNX.3.93.971204162040.1281A-100000@dns.vidtel.com>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Glad I got my chores done early:) Looks like the "right" coast may have it easy again.

N/T 0000Z-0200Z N0GLM Preston NY
G+ 0200Z-0400Z KS4L Randy AL

Pssst! Hey MD, we only need a run like last time to move into the top ten!
(7-11 pm EST for the UTC impaired)

-- Chris Cartwright, Technical Engineer | ccart@vidtel.com --
-- N3XRV ARRL-VE QRP WAS 27/10(w/c) | <http://dns.vidtel.com/~ccart> --
-- QRP-L #655 NORCAL #1891 QRP-ARCI #???? NJ-QRP #105 LIQRP #???? --

Date: Thu, 4 Dec 1997 20:33:13 GMT
From: adams@chuck.dallas.sgi.com (Chuck Adams)
To: ccart@dns.vidtel.com
Cc: qrp-l@Lehigh.EDU
Subject: [31924] Re: FOX: 4 hours of foxin' tonite

Message-ID: <199712042033.UAA03601@chuck.dallas.sgi.com>

Chris,

No need to egg 'em on in MD. You know that 0200Z is way past their bedtimes. I doubt that Nils in OH is even up at that hour. :-)

Chuck Adams K5FO CP-60 adams@sgi.com
<http://reality.sgi.com/adams/index.html>

Date: Thu, 4 Dec 1997 14:35:59 -0600
From: Tim Ahrens <tahrens@inetport.com>
To: tomm@xata.com
Cc: qrp-1@Lehigh.EDU
Subject: [31925] Re:Palmtop Computers
Message-ID: <199712042035.OAA02676@admin.inetport.com>
MIME-Version: 1.0
Content-Type: text/plain
Content-Transfer-Encoding: quoted-printable

Hi Tom - I use a Psion for my logging (in the field too), and have not seen any problems with it. I'm typing this reply on the box too! =20

It uses some version of the ARM for it's brain.

This Series 5 does e-mail, Word, and Excel documents.

I know it's the old Chevy/Ford question. but I think that the Psion is -better- than the CE boxes. If you are looking at buying a palmtop, look at a Psion too. Please, no flames, no negatives sent to those who like CE boxes. :-)

Good luck & happy holidays

cu

Tim W5FN

ps.. W03B is re-writing a logging program that he had done for an earlier version of the psion. I keep all of my stuff in it.

Date: Thu, 04 Dec 1997 14:35:47 -0600
From: "Jeff M. Gold" <jmg@tntech.edu>
To: QRP-L <qrp-l@Lehigh.EDU>
Subject: [31926] SGC2020
Message-ID: <34871423.7F07067A@tntech.edu>
MIME-version: 1.0
Content-type: text/plain; charset=us-ascii
Content-transfer-encoding: 7bit

All,

well guess SGC really handled all the calls/emails about the fact that the rig originally was to come with the mike. The rig now does come with the mike, of course they added on \$30 to the price to cover the mike.

72

Jeff, AC4HF

anxiously awaiting info on the K2, anychance that mere mortals will be able to afford the complete kit. Who is taking the bets currently on selling price?

--

Jeff M. Gold, Manager
Academic Computing Support
Tennessee Technological University
(615)372-3979

Date: Thu, 04 Dec 1997 14:45:35
From: lalexe@pcnet.pcnet.ro (Laurentiu Alexe)
To: gqrp-l@blacksheep.org
Cc: qrp-l@Lehigh.EDU
Subject: [31927] Spice Circuit Simulator...
Message-ID: <35@lalexe.pcnet.ro>

Hi,

Please take a look at:

<ftp://ftp.ee.ualberta.ca/pub/electrical/win95/Win95Spice.zip>
which has 2044K and included the two installation disks.

Also fine design and modeling RF software you can find out at:
<http://members.aol.com/RFTools/index.html>

You will find here two programmes: rfwb40.zip and eeref15.zip
("rfworkbench"=tx-rx design" and "electronic engineer reference").

First has 261K compressed and the second 282K compressed.

73/72 de Dan Y03DAN
#8703 GQRP #857 QRP-L

Date: Thu, 04 Dec 1997 15:50:44
From: Steven Weber <kd1jv@moose.ncia.net>
To: qrp-l@Lehigh.EDU
Subject: [31928] Re: Market survey, DDS VFO
Message-ID: <3.0.1.16.19971204155044.24878142@mailhost.ncia.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Many thanks to all who responded.

Not a real great deal of interest, but enough to make it look like it's worth doing. Maybe we'll pickup a few more when it gets closer to being a reality and I make the sales pitch :-)

I've already made up a good half dozen various prototypes, so the program to run the DDS chip is pretty much done. Just a matter of deciding on the exact physical layout and finding a good pcb house to make the boards.

BTW, looks like the square display board is the winner and will make a really cute unit in the mini LMB box. Even if you don't use the VFO to run a radio, it's makes a great signal generator.

I made a note of all that expressed interest, will get back in touch when things are moving along.

72,
Steve, KD1JV....In the White Mountains of New Hampshire

"Melt Solder"

Date: Thu, 4 Dec 1997 13:37:12 -0800
From: "Michael A. Gipe" <mgipe@reliablemeters.com>
To: <we6w@qsl.net>, "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [31929] Re: K8FF Paddle NOTE!
Message-ID: <199712042209.QAA13533@multi13.netcomi.com>

MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit

Ed and the group --

Certainly there are opportunities for tuning the NorCal paddles for best performance.

When I was in the middle of sending my number to fox NOUR the other night, the number one in 'NR614' suddenly turned into a sequence of a dozen dits when the paddle stuck. Fortunately that is the same as 'error!', so it sounded like I just made a little mistake and was correcting it.

I looked at the paddles and found that I had the magnetic spring spacing very wide on the dit side so it wasn't returning reliably enough. I think that a quick adjustment will do the trick.

I haven't taken all the vertical play out of the bearings either. In factory stock condition, the vertical play is about the same as my Envirotronic paddles, but much more than the Schurr. (Still waiting for the WBL to compare it.) It isn't too bad at all. Filing those bearings without going too far is too nerve wracking right now, so I am leaving well enough alone.

Note that the Envirotronic paddles, which are very close in design to the K8FF NorCal version, use a flexible braid screwed directly to the paddle arms to ensure good ground connection.

Mike K1MG

PS: reserve a spot for me in the pile up tonight!

Date: Thu, 4 Dec 1997 13:13:18 -0800 (PST)
From: Stanley Wilson <microres@crl.com>
To: qrp-1@Lehigh.EDU
Subject: [31930] SPICE questions
Message-ID: <Pine.SUN.3.91.971204130609.29334A-100000@crl.crl.com>
Mime-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Intusoft has several books, also at various prices.

What book should one give to the first grader ?

One that takes a circuit, generates a file, runs the pgm, displays the results, etc..

A hands on walk through the design problem/solution.

A cross between a cookbook and manual. Any recommendations ?

Kielkowski's books are easy to read, etc... but at least 3rd or 4th grade texts. Anyone know how to slow down his demo program when it runs on a windows 95 machine ? I exit to dos and it still runs to fast to read the screens. Curves look great, but can not see the details on how to generate them.

Anyone used Intusoft's "A Spice Cookbook" ?

Thanks, Stan

Date: Thu, 4 Dec 1997 21:39:43 +0000
From: Nancy <LAGESON@worldnet.att.net>
To: qrp-l@Lehigh.EDU
Subject: [31931] FOX Report-N0UR, Corrected version
Message-ID: <19971204213941.AAA21370@LOCALNAME>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

>Date: Wed, 03 Dec 1997 16:23:57
>To: QRP-L
>From: Jim-N0UR <LAGESON@worldnet.att.net>
>Subject: FOX Report-N0UR

Here is the corrected version of my log, my apologies to Randy AB7TK for missing his entry when coping my log to email, I must of bumped my ruler. Thanks to all again and 73's

>
>TIME CALL RST STATE NAME #
>0100 VE3ELA 579 ON KEN 1226
>01 WB4EXW 559 NC WATSON 5W
>02 AA2PF 599 NY DAVE 306
>03 KU7Y 579 NV RON 17
>04 N5LU 599 OK BILL 5W
>05 N4ROA 559 VA DAN 970
>06 N6MM 579 CA HARVEY 318
>07 VE5RC 339 SK BRUCE 886

>08	N4JS	559	NJ	JOHN	884
>09	KQ5U	559	TX	TERRY	5W
>10	AB5UA	579	OK	CHRIS	478
>11	K10J	559	TX	OJ	732
>12	N2GO	599	NY	JIM	381
>13	W3MWY	579	MD	GEORGE	3W
>14	KA80KH	569	KY	RICH	933
>15	K0EVZ	599	MN	DOC	861
>17	NQ7X	559	AZ	FLOYD	343
>18	N7VE	559	AZ	DAN	5W
>19	K2VCO	569	CA	VIC	725
>20	W6ZH	579	CA	PETE	257
>21	K50I	559	NM	TIM	73
>22	K6VNX	559	CA	ALLEN	5W
>23	K5ID	579	AR	KEN	652
>24	K6BAB	579	CA	HARVEY	5W
>25	WE6W	549	CA	ED	1068
>26	K1MG	559	CA	MIKE	614
>27	AB7TT	579	AZ	JOE	191
>28	N6XU	579	CA	STAN	66
>29	N4PK	579	NM	ED	1307
>30	KG2IM	579	NY	JOHN	1193
>31	W3GEO	579	KY	GEORGE	100W
>33	W0RW	599	CO	PAUL	2W
>33	K5JHP	449	TX	BILL	825
>35	N5JI	559	TX	DICK	1054
>36	WA1QVM	569	MA	JOEL	337
>37	W2UX	449	SC	GARY	593
>38	KS4L	569	AL	RANDY	468
>40	N7GS	579	MT	MAL	815
>41	KA3WMJ	599	PA	KEN	355
>42	N3XRV	559	MD	CHRIS	655
>43	VE6NJK	549	AB	NIELS	1239
>44	K5ZTY	339	TX	BILL	473
>45	N3YSI	559	PA	PAUL	4W
>46	WZ2T	599	NY	RICK	122
>47	KA7NOC	579	ID	STEVE	909
>48	NI0A	559	MN	JOHN	689
>49	KA5T	559	TX	LARRY	89
>50	KS4HQ	579	NC	BOB	801
>51	K4GT	559	GA	JIM	1023
>52	AC6LA	559	CA	DAN	515
>53	W5SB	339	TX	BILL	1279
>54	K2SJB	579	NY	DAVE	757
>55	AA5TA	339	TX	LARRY	1245
>57	N1QQV	579	CT	KEN	400
>57	KA3EAJ	579	MD	DAVE	245
>59	N4KV	599	TN	JOHN	1298

>0201	K50N	579	NM	GARY	770
>02	KJ3V	599	WV	LYNN	1227
>03	WB2GAI	559	NJ	RON	3W
>03	N0BS	559	MN	TOM	985
>05	N6WG	339	CA	BOB	5W
>06	VE6GK	579	AB	RICK	165
>07	AB7TK	559	ID	RANDY	102
>07	K5FO	599	TX	CHUCK	#1
>08	WD3P	579	MD	LARRY	1039
>08	K1XS	339	CT	KEN	494
>10	WV3J	569	VA	PAUL	1224
>10	AB7MY	559	AZ	GARY	571
>11	N7KT	559	AZ	ROGER	62
>13	NR3Z	579	PA	MARTY	813
>14	WJ2V	539	NY	PRESTON	49
>16	N2TNN	599	NJ	DEAN	560
>17	W1GM	579	CT	CHRIS	1177
>21	KB0VIJ	559	MN	MARK	100W
>24	VE7CQK	559	BC	PAUL	20
>28	WA6NAE	559	CA	DWIGHT	5W
>39	NQ7K	579	AZ	MIKE	47
>41	W7UQ	579	ID	RANDY	2W
>44	K5VUU	559	TX	ED	5W
>48	WA7JEG	559	WA	JIM	2W
>52	VE3SP	559	ON	RON	464
>56	W7QQQ	339	AZ	JACK	1210
>58	N6VZ	559	CA	GARY	891
>59.9	K0GJX	599	MN	CHUCK	5W

Total QSO's 84

Jim...NOUR

Date: Thu, 4 Dec 1997 13:41:25 -0800
 From: "Michael A. Gipe" <mgipe@reliablemeters.com>
 To: <slee@u.washington.edu>, "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
 Subject: [31932] Re: Market survey, DDS VFO
 Message-ID: <199712042214.QAA13734@multi13.netcomi.com>
 MIME-Version: 1.0
 Content-Type: text/plain; charset=ISO-8859-1
 Content-Transfer-Encoding: 7bit

Stephen --

The AD9850 is a tiny, tiny, 20 mil pitch leaded SOIC style package. Are the adapters you are recommending intended to convert this package to PLCC? Or are they to convert a PLCC to something bigger?

Mike K1MG

> From: S. Lee <slee@u.washington.edu>
> There's a company called Technological Arts located in
> Toronto, Ontario, that sells a good quality PLCC to
> breadboard adapter....
>
>
>

Date: Thu, 4 Dec 1997 16:43:13 EST
From: MNHopkins <MNHopkins@aol.com>
To: QRP-L@Lehigh.EDU
Subject: [31933] DeMaw Univ. TX QSY to 30M?
Message-ID: <38a1c2b3.348723f4@aol.com>
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7bit

A local wants to build up a Universal TX from Solid State Design for the Radio Amateur, but our edition, the \$7 one, has circuit constants only for the pre-WARC bands.

Can any one cite the upgrade for 30M or share any experiences thereof ?

73 de ab5l, g-qrp #669 in dallas, tx of all places
Michael Hopkins
Box 226841
Dallas, TX 75222 MNHopkins@AOL.com

Date: Thu, 4 Dec 1997 16:59:22 -0500 (EST)
From: KB8UMD@aol.com
To: qrp-l@Lehigh.EDU
Subject: [31934] FS: DSP Filter/QRP TX
Message-ID: <971204165922_108001343@mrin83.mail.aol.com>

JPS NRF-7 DSP filter w/manual and original carton. CW/SSB/DATA filtering. CW has 200/500hz filtering. New condx. Current AES close-out sale \$170. I'm asking \$85 shipped.

Ramsey QRP transmitters built, board only 20 and 40mtrs \$18 each, shipped. 20m has 14.060 crystal and 40m has 7.040 crystal. Slot for 2nd crystal. About 7-10khz spread. About 1 watt out. I have worked many countries w/20m version and dipole.

73,
John
KB8UMD@aol.com
Jrperego@dcrrn.e-mail.com

Date: Thu, 4 Dec 1997 14:06:00 -0600
From: Bob Tellefsen-CNSE97 <Bob_Tellefsen-CNSE97@email.mot.com>
To: qrp-1@Lehigh.EDU
Subject: [31935] Re: Good antenna for Fox Hunting
Message-ID: <M2338233.001.orpd0.1.971204222712Z.CC-MAIL*/OU=LMPCC4/OU=ILBB/PRMD=MOT/ADMD=MOT/C=US/@MHS>

George:

If you have a 40m dipole up 50 ft, you're already a cut above many of us.

Be happy and catch many foxes. :-)

72, Bob N6WG and 01' Kenwood

Date: Thu, 4 Dec 1997 15:32:34 -0700
From: "Steve Hurst" <shurst@magiclink.com>
To: <qrp-1@Lehigh.EDU>
Subject: [31936] WBL ???
Message-ID: <199712042230.RAA45088@nss4.cc.Lehigh.EDU>
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit

Gang,

Forgive my ignorance on this question !! What is a "WBL paddle " ?? I

have seen several reference's to it on this list and don't know what they are !!! Tnx again and forgive the BW (I know what that is ...hehehehe)
! :-)

73,

Steve Hurst

KA7NOC (southern Idaho)

<http://www.magiclink.com/web/shurst>

shurst@magiclink.com

Date: Thu, 4 Dec 1997 14:42:48 -0800 (PST)
From: "S. Lee" <slee@u.washington.edu>
To: "Michael A. Gipe" <mgipe@reliablemeters.com>
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [31937] Re: Market survey, DDS VFO
Message-ID: <Pine.A41.3.95b.971204140941.265480-100000@homer03.u.washington.edu>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Ugh, we'll get it right yet....it's an AD9850BRS which is an SSOP packaged device. SSOP stands for Shrink Small Outline Package. Not what I have in mind when it comes to breadboarding. Try using Analog Devices' AD7008JP50 in 44-pin PLCC package. A much simpler conversion to breadboard...just press the chip into one of Technological Arts' adapters then plug that into the breadboard; the kind one uses with dual inline package (DIP) devices. No special tools required. Sorry for any confusion I may have caused. Enjoy!

de AB7HI, Stephen Lee, Federal Way, WA
slee@u.washington.edu

On Thu, 4 Dec 1997, Michael A. Gipe wrote:

> Stephen --

>

> The AD9850 is a tiny, tiny, 20 mil pitch leaded SOIC style package. Are
> the adapters you are recommending intended to convert this package to PLCC?
> Or are they to convert a PLCC to something bigger?

>

> Mike K1MG

>

>

> -----

> > From: S. Lee <slee@u.washington.edu>

> > There's a company called Technological Arts located in

> > Toronto, Ontario, that sells a good quality PLCC to
> > breadboard adapter....
> >
> >
> >
> >
>

Date: Thu, 4 Dec 1997 15:37:19 -0800
From: "Michael A. Gipe" <mgipe@reliablemeters.com>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [31938] Re: Grounding Question
Message-ID: <199712050009.SAA19594@multi13.netcomi.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit

Steve --

You have brought up a good point. When you move your shack away from your source of 'ground', you can easily run into problems. Consider a typical second floor ground scheme with a heavy duty braid or strap running from the rig, out the wall, down to the ground, away from the foundation, and clamped to an 8 foot ground rod. The electrical length may be around 16 feet, which is coincidentally about a quarter wave on 20 meters. The nice low impedance ground at the ground rod may appear as a high impedance at the radio end.

The simplest way that I have found to handle this is by driving several ground rods and running separate straps from the radio/ATU to each ground rod. By using differing lengths of wire, even if one of them presents a high impedance to the radio, the others will not.

At my ground floor station, I have three eight-foot ground rods located around the tower base, and feed each with a separate strap from the rig. I also have them connected to each other.

Mike K1MG

>
> Steve Hurst[SMTP:shurst@magiclink.com] wrote:
> > How do you
> > ground your [second floor] equipment ? Just run a ground wire outside ,
down the side of

> > the house and onto a grounding rod ? Will the grounding wire become a
> > resonator of any kind ? My first time with the shack up this high off
the
> > ground and I wanna do it right !! :-) Any and all tips much
appreciated !!

Date: Thu, 4 Dec 1997 18:38:20 -0500 (EST)
From: Fran Flynn <fflynn@together.net>
To: qrp-1@Lehigh.EDU
Subject: [31939] Re: 38s sideband supression help!
Message-ID: <199712042338.SAA04148@sequoia.together.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

>Anyhow, at one end of the tuning I transmit on one side of zero beat(
ie
>the null) and at the other end of the tuning I am transmitting on the
>other side of zero beat.
>72
>de Jerry AA10F

Hi Jerry,

it sounds like the receiver in this rig could be a
direct-conversion type?

Randy AB5NI

It's not direct conversion, it's superhet, but the IF filter consists of
only one crystal (so, it's not too far from *behaving* like a DC reciever).
So, it's not an extremely narrow filter. What you are
hearing is just the fairly wide bandwidth of the IF filter since CW has
essentially no sidebands. Before I get flamed, yes a code signal does
have sidebands, but only during the rise and fall times of the modulating
signal (when you key it, it's modulation). If you just hold the key down,
you are sending a pure carrier (hopefully), with no sidebands. So, you're
not hearing sidebands, you are just hearing the beat signal when the IF
signal of your reciever is tuned to a frequency near the BFO frequency.
You will hear a tone whether you tune to one side or the other of the
signal. If you had a narrower filter, e.g. more crystals, you might not
hear that. In a simple rig like the 38s, this may be one of the compromises

you have to make.

fflynnattogetherdotnet
(email address rearranged to foil spambots)
Francis Flynn
Ham Radio callsign:KM1Z

End of QRP-L Digest 929

